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Knowledge, Attitude and Practice towards Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak

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ABSTRACT

Background: Alcohol consumption is a common cultural practice among the Iban community in Sarawak, often associated with social and traditional events. However, excessive or habitual intake poses significant health and social risks. Understanding knowledge, attitudes, and practices related to alcohol use within this population is essential for assessing potential health implications and guiding public health interventions. **Objectives:** To examine the level of knowledge, attitude and practice towards alcohol consumption among the Iban community at Lubau Baru Longhouse, as well as to examine the relationship between knowledge, attitude and practice of alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak. **Methodology:** A cross-sectional study was conducted through a simple random sampling. The data was collected from Lubau Baru Longhouse residents (n=98). The 15 items on knowledge, 15 items on attitudes questionnaire and 10 items on Alcohol Use Disorder Identification Test (AUDIT) towards alcohol consumption. **Result:** Findings showed that most of the respondents possessed moderate knowledge, 84 respondents (85.7%), poor attitudes, 50 respondents (51%), and the majority had low-risk practice, 44 respondents (44.9%), towards alcohol consumption. Further analysis revealed no significant correlation between knowledge and attitude (r = 0.014, n = 98, p = 0.893), knowledge and practice (r = 0.076, n = 98, p = 0.460). However, a weak correlation between attitude and practice (r = 0.20, n = 98, p = 0.064) towards alcohol consumption. **Conclusion:** This study concluded that Lubau Baru Longhouse residents had moderate knowledge, poor attitudes and low-risk practice towards alcohol consumption. Strengthening health education and targeted interventions can enhance understanding and promote responsible consumption. These insights contribute to the development of culturally sensitive strategies for alcohol-related public health initiatives.

Keywords: Alcohol consumption, knowledge, attitude, practice, Lubau Baru Longhouse

ABSTRAK

Latar Belakang: *Pengambilan alkohol merupakan amalan budaya biasa dalam kalangan komuniti Iban di Sarawak, sering dikaitkan dengan acara sosial dan tradisi. Walau bagaimanapun, pengambilan yang berlebihan atau berterusan membawa risiko kesihatan dan sosial yang ketara. Memahami tahap pengetahuan, sikap dan amalan berkaitan penggunaan alkohol dalam populasi ini adalah penting untuk menilai implikasi kesihatan serta membimbing intervensi kesihatan awam.* ***Objektif:*** *Untuk mengkaji tahap pengetahuan, sikap dan amalan terhadap pengambilan alkohol dalam komuniti Iban di rumah panjang Lubau Baru, serta untuk meneliti hubungan antara pengetahuan, sikap dan amalan pengambilan alkohol dalam komuniti tersebut di rumah panjang Lubau Baru, Sarawak.* ***Metodologi:*** *Satu kajian keratan rentas (cross-sectional) telah dijalankan menggunakan persampelan rawak mudah. Data dikumpul daripada penduduk rumah panjang Lubau Baru (n = 98). Instrumen kajian merangkumi 15 item untuk pengetahuan, 15 item soal selidik sikap, dan 10 item daripada* Alcohol Use Disorder Identification Test *(AUDIT) berkaitan pengambilan alkohol.* ***Keputusan:*** *Penemuan menunjukkan bahawa majoriti responden mempunyai tahap pengetahuan sederhana, iaitu 84 orang (85.7%), sikap yang rendah, 50 orang (51%), dan kebanyakan mempunyai amalan berisiko rendah, 44 orang (44.9%), terhadap pengambilan alkohol. Analisis lanjut menunjukkan tiada hubungan signifikan antara pengetahuan dan sikap (r = 0.014, n = 98, p = 0.893), serta antara pengetahuan dan amalan (r = 0.076, n = 98, p = 0.460). Walau bagaimanapun, terdapat hubungan lemah antara sikap dan amalan (r = 0.20, n = 98, p = 0.064) terhadap pengambilan alkohol.* ***Kesimpulan:*** *Kajian ini menyimpulkan bahawa penduduk rumah panjang Lubau Baru mempunyai tahap pengetahuan sederhana, sikap yang lemah dan amalan berisiko rendah terhadap pengambilan alkohol. Memperkukuh pendidikan kesihatan dan intervensi yang disasarkan boleh meningkatkan pemahaman dan mempromosikan penggunaan yang bertanggungjawab. Tinjauan ini*

membantu dalam pembangunan strategi peka budaya untuk inisiatif kesihatan awam berkaitan pengambilan alkohol.

Kata kunci: Pengambilan alkohol, pengetahuan, sikap, amalan, rumah panjang Lubau Baru

DECLARATION

I confirm that the research study titled 'Knowledge, Attitude and Practice towards Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak' is my work. It was conducted between 2024 and 2025 at the Lubau Baru Longhouse, 95700 Betong, Sarawak, Malaysia. I affirm that all citations and references were properly acknowledged in the text. As a result, this confirms that this research was not previously submitted for any evaluated qualification.

Signature

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Date: 03/07/2025

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LIST OF ABBREVIATIONS

AUDIT	Alcohol Use Disorder Identification Test
EBP	Evidence-Based Practice
NGOs	Non-governmental associations
SPSS	Statistical Package for the Social Sciences
UNIMAS	Universiti Malaysia Sarawak
WHO	World Health Organization

CHAPTER 1: INTRODUCTION

1.1 Introduction

The present chapter describes the study's background, problem statement, research questions, research aim, and research objectives. Additionally, the researcher will explain the significance of these research objectives, provide definitions of terminology encompassing conceptual and operational meanings, and summarise this chapter.

1.2 Background of Study

Alcohol consumption holds cultural significance in numerous rural Dayak communities in Sarawak, particularly the Iban communities and is closely linked to social, ceremonial, and religious practices. Alcoholic beverages, including Tuak (rice wine), have historically been consumed during festive occasions, rituals, and social gatherings, serving as symbols of unity, hospitality, and celebration. The current context of alcohol consumption has evolved, which has caused concerns regarding its effects on health, social well-being, and economic stability in these communities. According to the World Health Organization (2024), approximately 400 million individuals, constituting 7% of the global population aged 15 and older, experienced alcohol use disorders. Of this, 209 million individuals (3.7% of the worldwide adult population) experienced alcohol dependence (World Health Organization, 2024). In 2019, the greatest percentage of alcohol-attributable deaths (13%) occurred among those aged 20-39, indicating that alcohol intake had a disproportionate impact on this age group. Rural regions, including those populated by the Iban community, frequently encounter distinct challenges associated with alcohol consumption. Restricted access to healthcare, education, and awareness initiatives regarding the harmful effects of

alcohol leads to inadequate knowledge and potentially hazardous attitudes and practices. The effects of alcohol vary among individuals, influenced by risk factors including pre-existing health conditions, concurrent substance abuse, and consumption levels (Taylor et al., 2016). Excessive intake of alcohol may cause individuals to have alcohol use disorders. Alcohol use disorder was formerly referred to as alcoholism or alcohol dependence. The term refers to alcohol consumption resulting in mental or physical health issues (Sanchez-Roige et al., 2020).

A standard drink contains 10 grammes of pure alcohol per week, which applies to standard drinks in Malaysia (Mutalip et al., 2014). However, the amount of alcohol in a drink can vary depending on the size and strength of the drink. To minimise the risk of alcohol-related diseases or injuries, it is recommended that healthy men and women limit their consumption to a maximum of 10 standard drinks per week and no more than 4 standard drinks on any single day (Department of Health and Aged Care, 2019). In addition, witnessing family members, relatives, and friends consuming alcohol significantly influences an individual's attitude, potentially leading them to perceive it as normative behaviour (Sudhinaraset et al., 2016). Over time, individuals often mistakenly become trapped in the fatal behaviour of alcoholism, eventually resulting in their lives becoming absolutely in every way (Varghese & Dakhode, 2022). The relationship between cultural acceptance and the adverse effects of excessive alcohol consumption, including addiction, familial conflict, and health complications, constitutes a significant area for research and intervention. Understanding the knowledge, attitudes, and practices of the Iban community regarding alcohol consumption is crucial for addressing these challenges. Knowledge affects individual perceptions of alcohol-related risks, while attitudes determine the readiness to engage in healthy behaviours, and practices represent the actual behaviours in daily life.

1.3 Problem Statements

Alcohol consumption is a major public health issue worldwide and represents a critical risk behaviour among the Iban community nowadays. However, there is a scarcity of comprehensive studies that investigate the attitudes and understandings of the Iban community on alcohol consumption. Rural communities frequently encounter difficulties related to insufficient knowledge concerning alcohol consumption, due to restricted access to healthcare services, educational resources, and culturally appropriate interventions. Social isolation, economic instability, and community norms that support substance use can intensify these problems. Rural youth have a higher likelihood of high-risk behaviours, such as driving under the influence, and demonstrate elevated levels of alcohol consumption in comparison to their urban counterparts. Furthermore, rural adults may hold misconceptions regarding the risks of alcohol or perceive its consumption as less risky (Gale et al., 2019). In certain regions, alcohol consumption is normalised or regarded as a personal matter, leading individuals to be less aware of its wider health and societal effects (Hiremath, 2016). Boredom, insufficient employment opportunities, and limited alternative entertainment may contribute to increased alcohol consumption rates in rural areas (Pramaunururut et al., 2022).

The most recent adolescent health survey by the Institute of Public Health Malaysia (2017) indicates that the prevalence of former drinkers in Sarawak, along with current drinkers, is nearly double the national average. Most adolescents consumed their first alcoholic beverage before the age of 13 years old, with Sarawak accounting for the highest proportion of these statistics. Sarawak ranks as one of the Malaysian states with the highest prevalence of current drinkers, comprising nearly one-fifth of its population, which equates to approximately half a million individuals. Conversely, a higher prevalence of current drinkers was observed in urban areas relative to rural areas, among males, and individuals

with higher education. In 2015, the rate of alcohol consumption among '*Bumiputeras*' was the highest in the nation. The prevalence of binge drinking among '*Bumiputeras'* approached three-quarters. The prevalence has decreased compared to the 2011 survey; however, there is an observed increase in binge drinking among current drinkers and adolescents (Ahmad et al., 2017).

Moreover, poor knowledge, attitude and practice towards alcohol consumption may cause excessive consumption of alcohol, which can result in several negative outcomes, including alcohol toxicity, liver infection, and chronic addiction. (Aboagye et al., 2021). Binge drinking is usually linked to risky behaviour, including driving under alcohol influence, injuries, fights, the use of other substances, and unsafe sexual practices (Htet et al., 2020). Also, alcohol abuse significantly contributes to conflicts between families such as domestic violence and children in households impacted by alcohol misuse may experience neglect or abuse, which can adversely affect their education and development and eventually may lead to divorce and family separation (Lander et al., 2013). In addition, poor adult practices towards alcohol use create a cycle in which future generations learn and adopt similar attitudes and behaviours. Rural communities may face economic consequences and financial strains as they spend more money on alcohol instead of essential needs which can lead to poverty (Khan & Shahzadi, 2022).

Considering the possible dangers linked to alcohol intake, it is crucial to acquire a better understanding of the prevalence and patterns of consuming alcohol among the Iban community to figure out and mitigate the risks connected with harmful drinking behaviours. It is vital to understand the extent of awareness, knowledge, attitudes and practices within this specific group. There are plenty of worldwide studies that evaluate the knowledge, attitude and practice of the Iban community towards alcohol consumption. However, it is

essential to acknowledge the scarcity of published research in Malaysia, specifically in Sarawak that has examined this subject matter. Hence, the primary objective of this research project was to investigate the knowledge, attitude and practice of the Iban community regarding alcohol consumption to address existing research gaps.

1.4 Research Aim, Questions and Objectives

1.4.1 Research Aim

The researcher will implement this research project to examine the knowledge, attitude and practice towards alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak.

1.4.2 Research Questions

1.4.2.1 What is the level of knowledge on alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak?

1.4.2.2 What is the attitude towards alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak?

1.4.2.3 What is the level of practice towards alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak?

1.4.2.4 Is there any relationship between knowledge, attitude and practice towards alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak?

1.4.3 Research Objectives

1.4.3.1 To determine the level of knowledge on alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak.

1.4.3.2 To identify the attitude towards alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak.

1.4.3.3 To identify the level of practice towards alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak.

1.4.3.4 To examine the relationship between knowledge, attitude and practice of alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak.

1.5 Hypotheses

1.5.1 Null Hypotheses ($H_{0)}$: There is no significant relationship between knowledge, attitude and practice towards alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak.

1.5.1 Alternative Hypotheses ($H_{1)}$: There is a significant relationship between knowledge, attitude and practice towards alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak.

1.6 Significance of Study

1.6.1 Nursing Education

Research on alcohol consumption among the Iban community in rural areas is essential for influencing future nurses' knowledge, abilities, and attitudes. Nurses, especially nursing students, must receive education on alcohol consumption early as they are exposed to distinctive stressors that may elevate the likelihood of alcohol misuse, which could affect their academic performance, health, and future as healthcare professionals. For instance, nursing students should have been taught knowledge of the health consequences of alcohol, such as its effects on academic performance, mental health, cardiovascular system, and liver. Alcohol misuse often leads to stigma, which may hinder effective patient care. Education helps the development of empathy and nonjudgmental attitudes in nursing students, thereby enhancing their relationships with patients. Also, nursing students educated in alcohol-related health issues can significantly contribute to prevention efforts by informing communities and individuals about the risks associated with alcohol consumption, especially among vulnerable groups such as adolescents and pregnant women, particularly in communities that live in rural areas with limited access to healthcare facilities. Other than that, understand the potential legal implications, impaired judgement, and poor job performance that may result from alcohol misuse, as well as the social and professional consequences. The global prevalence of alcohol-related issues indicates that insufficient education may render nurses unprepared to address these challenges. Addressing these gaps ensures that nursing students possess the necessary competence and confidence to manage alcohol-related cases across various healthcare settings. Hence, researching alcohol use among undergraduates is important because it can train the next generation of nurses to deal with prevalent public health issues.

1.6.2 Nursing Practice

This research project has the potential to improve the standard of care for patients or family members affected by alcoholism or excessive alcohol consumption by identifying existing gaps in knowledge and potentially harmful attitudes. Their acquired knowledge and prevailing attitudes significantly shaped nursing students' engagement in caring activities. Nurses with sufficient knowledge can identify early warning signs of alcohol misuse in patients, facilitating timely actions and referrals. For example, nurses can employ standardised instruments such as the AUDIT (Alcohol Use Disorders Identification Test) to detect patients at risk for harmful drinking behaviours. It also focuses on prevention and relapse management for individuals with high-risk alcohol abuse by teaching coping strategies and identifying triggers to mitigate the likelihood of relapse. Improving understanding among nurses can lead to more effective and empathetic care for patients, particularly those struggling with alcohol dependence, thereby potentially enhancing their overall well-being. Hence, appropriate nursing practices in managing individuals or patients with alcohol-related problems may promote a better quality of life, health education and overall outcomes.

1.6.3 Nursing Research

Comprehending research on alcohol consumption among the Iban community can substantially improve nursing research in various ways, enabling enhanced care delivery, public health promotion, and more effective management of alcohol-related concerns. Nursing research on alcohol consumption is crucial in advancing evidence-based practice (EBP) by generating insights, refining interventions, and enhancing patient care and health

outcomes. Research identifies reliable tools for screening alcohol use, including the Alcohol Use Disorder Identification Test (AUDIT) questionnaire, and assesses their applicability across various settings. Nurses may utilise these validated instruments to identify individuals at risk accurately. Findings from nursing research regarding alcohol use can inform the integration of more relevant content into nursing curricula, thereby preparing future nurses with the necessary knowledge and skills to manage alcohol-related issues in clinical practice. In addition, nursing research is vital for advancing professional development by improving knowledge, skills, and practices within the nursing profession. Research ensures that nurses remain informed about the most recent developments in healthcare and fosters curiosity and self-directed learning, which are essential components of professional development. Also, nursing research facilitates the accessibility and applicability of current evidence regarding alcohol-related health issues, treatments, and care services in clinical environments, thereby improving the overall quality of care services. Hence, it bridges the gaps between nursing research and practices.

1.7 Operational and Conceptual Definition of Terms

Terms	Conceptual definition	Operational definition
Knowledge	Knowledge is familiarity, awareness, or understanding of individuals or concepts, including facts, information, descriptions, or skills. This understanding is gained through experience or education, achieved by perceiving, discovering, or learning (Librarianship Studies, 2017).	Level of understanding and clear awareness about alcohol consumption. The level of knowledge will be assessed using a questionnaire that was adapted, gained from open access and developed by Kumar (2006), which consisting of 15 items related to general information about alcohol, encompassing causes, practices, social acceptance and image, peer pressure, and consequences. Each statement presented a binary choice between the options "True" or “False".

Attitude	Attitude can be defined as feelings, beliefs, and actions directed toward a specific object, individual, concept, or event (Cherry, 2024).	It represents an individual's perspective, feelings, and beliefs about alcohol consumption. This section will assess attitude with 15 questions that was adapted, gained from open access and developed by Kumar (2006), using a 3-Likert scale will be employed, where positive statements will be rated as Agree–3, Undecided–2, and Disagree–1, while negative statements will be rated as Agree–1, Undecided–2, and Disagree–3.
Practice	The word "practice" is a verb that describes regularly performing an activity to enhance one's skills or acquire new ones (Gupta, 2023).	The practice will be measured using the Alcohol Use Disorder Identification Test (AUDIT) questionnaire consisting of 10 items, using a 5-Likert scale ranging from "0" for never, "1' for monthly or less, "2" for 2-4 times a month, "3" for 2-3 times a week, and "4" for 4 or more times a week.

1.8 Summary

This chapter discussed the background of the study, the problem statement, and the significance of the study in comprehending the purpose and importance of conducting this research among the Iban community at Lubau Baru Longhouse, Sarawak. Thus, this study examines the Iban community's knowledge, attitude, and practice towards alcohol consumption.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter aims to present relevant literature from online databases, including Google Scholar, ResearchGate, PubMed, and ScienceDirect, to improve understanding and generate ideas about the relationship between knowledge, attitude, and practice regarding alcohol consumption in Malaysia and other countries. Additionally, the articles are sourced from the most recent ten-year period, which encompasses 2014 to 2024. The keywords used were knowledge, attitude, practice and alcohol consumption. The literature review will be presented in the following subsections.

2.2 Knowledge towards Alcohol Consumption

Knowledge encompasses familiarity, awareness, or understanding of concepts, individuals, or skills, including facts, information, and descriptions. It is acquired through education or experience, involving perception, discovery, or learning (Librarianship Studies, 2017). According to the World Health Organization (WHO), a "standard drink" contains 10 g of ethanol. While global guidelines for alcohol consumption limits vary, the WHO recommends no more than two standard drinks per day for both men and women. In contrast, the 2020–2025 American guidelines suggest a daily limit of two standard drinks for men and one for women when consuming alcohol.

The definition of a "standard drink" is often a source of confusion in studies assessing public understanding of alcohol consumption's effects. A study by Isted et al. (2015) involving 179 adult patients in London medical facilities revealed that although most

respondents reported some level of knowledge, fewer than three-quarters could accurately identify the maximum recommended intake. Similarly, despite general awareness of government guidelines on responsible drinking, individuals aged 16–25 displayed limited understanding of standard drink-based recommendations. Research by Vallance et al. (2020), which surveyed 836 Canadian liquor store customers, found that only 29.5% could correctly identify the number of standard drinks in typical alcoholic beverage volumes. The study also identified factors positively associated with accurate estimations, including female gender, age over 45, higher income, and greater health awareness. Higher education levels and heightened subjective health awareness were linked to better knowledge of alcohol consumption limits. However, a significant proportion of adults still lack an adequate understanding of alcohol composition, safe dosage, and public health recommendations (Vallance et al., 2020).

Moreover, a study conducted by Barber (2016) found that participants generally had limited knowledge of alcohol's long-term health effects, with liver and kidney damage being the most recognized consequences. Similarly, Isted et al. (2015) noted that while all participants associated excessive alcohol consumption with liver disease, many also recognized its link to hypertension. However, Coomber et al. (2017) observed lower awareness levels among over 1,000 Australian participants, with only about 60% identifying cirrhosis, less than 45% mentioning stomach diseases, and fewer than 33% noting pancreatitis as a potential consequence of excessive alcohol use. In contrast, a study by Nwosu et al. (2022) with 400 men in Southeast Nigeria found that more than 80% were unaware of the risks of liver or kidney disease from alcohol consumption.

Furthermore, research by Wysokińska and Kołota (2022) highlights that most women are aware of alcohol's harmful effects on pregnancy and fetal development. Women

with higher education levels were more likely to recognize that alcohol consumption during pregnancy poses risks. Elek et al. (2013) assessed 149 women's knowledge and experiences, finding that most participants were informed about the need to abstain from alcohol during pregnancy. However, some healthcare professionals endorsed moderate wine consumption during pregnancy. Similarly, Kajak and Olejniczak (2013) reported that nearly 30% of male high school students believed wine to be safe during pregnancy, while fewer than half of non-pregnant respondents strongly disagreed with this belief. Misconceptions persist across age groups, with some individuals perceiving only high doses of alcohol as harmful, while many remain uncertain about safe consumption levels during pregnancy.

Additionally, limited literature exists on public beliefs about the potential benefits of alcohol. A study by Dydjow-Bendek et al. (2015) found that Gdańsk University students believed wine consumption reduced the risk of heart attacks and strokes, improved carbohydrate metabolism, and stimulated digestion. Women reported consuming wine for its calming effects, making it the most frequently cited alcoholic beverage with perceived health benefits. Similarly, Higgins and Llanos (2015) found that over 70% of 211 U.S. wine consumers associated red wine with cardiovascular health benefits, such as reduced cholesterol levels, improved blood sugar control, and enhanced memory. However, misconceptions about alcohol's health benefits often stem from stereotypes, increasing societal tolerance for alcohol consumption. This highlights the need for educational campaigns to address these myths (Wysokińska & Kołota, 2022).

However, the literature reveals significant gaps in understanding the health effects of alcohol and awareness of public health guidelines. Many studies focus on small sample sizes or single locations, limiting their reliability and generalizability. Additionally, there is a lack of research evaluating changes in knowledge levels among populations and the effectiveness

of educational interventions at national and global levels. This underscores the need for further studies to explore how alcohol consumption impacts public knowledge and identify areas requiring targeted interventions. Recommendations include incorporating health warnings on alcoholic product labels to convey information about the short- and long-term risks of alcohol consumption. Educational efforts targeting young people are especially critical, as they can influence drinking behaviours. However, current research is limited in its ability to assess the long-term effects of educational initiatives. Future studies should aim to evaluate the sustained impact of these interventions and address gaps in consumer knowledge about alcohol's health effects.

2.3 Attitude towards Alcohol Consumption

Attitude refers to feelings, beliefs, and actions directed toward a specific object, individual, concept, or event (Cherry, 2024). Perspectives on alcohol consumption can vary significantly due to cultural, societal, religious, and personal influences. A critical area of scholarly interest is the diverse attitudes and viewpoints that individuals and societies hold regarding alcohol use.

Numerous studies have explored global attitudes toward alcohol consumption. Research by Janssen et al. (2014) highlighted differences in attitudes and drinking behaviours between those who consume alcohol and those who abstain. Drinkers generally held positive views of alcohol, associating it with enjoyment, often starting consumption out of curiosity. Conversely, abstainers tend to avoid alcohol due to its taste, lack of interest, or the absence of any compulsion to drink. Parental influence played a distinct role in shaping alcohol-related attitudes in both groups. Among drinkers, some parents-imposed rules

around alcohol consumption, while others advised limiting intake or waiting until the legal drinking age. For abstainers, parental restrictions such as forbidding alcohol before the age of 16 years old were typically followed. Peer influence also shaped attitudes differently. Drinkers were more susceptible to peer pressure, leading to increased consumption in social situations, while abstainers were more likely to decline alcohol, a choice that was generally respected by their peers.

Interestingly, the findings from Janssen et al. (2014) contrast with a prior study by Mathijssen et al. (2012). While focus group participants exhibited cautious attitudes toward alcohol and limited interest in consumption, the earlier study identified a more positive, future-oriented view of alcohol among abstainers, associating it with enjoyment, maturity, and freedom. These differences reflect how attitudes evolve based on parental restrictions and societal norms, with cautious views translating into minimal drinking intentions or behavior among abstainers.

Moreover, adolescents often consume alcohol for relaxation, enjoyment, and social belonging (Carvajal & Lerma-Cabrera, 2015). Alcohol is perceived as a marker of maturity and is used to gain social recognition (Merrill et al., 2023). A review by Sjödin et al. (2021) found that social motives, both positive (such as camaraderie) and negative (peer pressure and fear of exclusion), are the primary drivers of alcohol consumption among young people. These findings suggest that peer dynamics and the desire for social acceptance strongly influence adolescent drinking behaviour.

Research on alcohol attitudes, however, has notable gaps. Focus group studies, which included balanced representation by age and gender, revealed active participation and open expression of opinions. Still, group composition may have influenced results, particularly in

terms of prior relationships among participants or the overrepresentation of girls in certain groups. While segmentation by alcohol-related attitudes rather than demographics reduced potential biases, differences in educational level and school environment may still have impacted the findings. Understanding these attitudes is crucial for developing effective educational and preventive programs to promote healthier community behaviours.

Furthermore, Rogowska et al. (2020) explored the relationship between drinking behaviors, gender, and attitudes toward alcohol. Their findings supported the hypothesis that gender and attitudes significantly influence drinking patterns, including excessive and regular consumption. Male students exhibited more favourable attitudes toward alcohol, drank more frequently, and consumed larger quantities per occasion compared to female students. Women were more likely to express disapproval and recognize the risks of excessive drinking. Students who engaged in binge drinking (defined as consuming more than five drinks in one occasion) displayed a more tolerant attitude toward alcohol, characterized by reduced disapproval and risk perception. While gender differences in attitudes were more pronounced than differences in drinking frequency, excessive drinkers regardless of gender demonstrated greater tolerance for alcohol. The study highlighted the importance of university prevention efforts focused on altering attitudes toward alcohol. Strategies that enhance disapproval of excessive drinking and increase awareness of its risks are particularly effective in reducing hazardous consumption. Disapproval emerged as a key predictor of alcohol-related behaviors, suggesting that fostering stronger negative attitudes toward excessive drinking can help mitigate its prevalence.

Despite its contributions, the study by Rogowska et al. (2020) has limitations. The sample was drawn exclusively from one technical university, limiting the generalizability of the findings to students in other fields, such as medicine, arts, or social sciences.

Additionally, the data was collected in 2010, which may not reflect current attitudes and drinking patterns, given societal and cultural shifts over the years. Future research should include diverse student populations and consider changes in attitudes and behaviours to provide a more comprehensive understanding of alcohol consumption trends.

2.4 Practice towards Alcohol Consumption

The term "practice" refers to the act of regularly engaging in an activity to improve skills or gain new ones (Gupta, 2023). A study by Gahamat et al. (2023) found that 50% of Dayak adolescents were categorized as low-risk alcohol consumers, while 31% were identified as hazardous alcohol users. Additionally, 11% of adolescents were abstainers, while a smaller percentage were classified as harmful alcohol users (5%) or alcohol-dependent (3%). The most consumed alcoholic beverage among adolescents was beer (72.4%), followed by Tuak beras (45.0%), wine (31.3%), Langkau (29.2%), and brandy (23.6%). Less frequently consumed beverages included Ijuk (13.2%) and other alcoholic drinks (14.3%).

Next, older male Dayak adolescents from socio-economically disadvantaged backgrounds, marked by factors such as unemployment, low levels of education, financial hardship, and large family sizes, were more likely to engage in alcohol consumption. These findings align with trends observed in Australia, where older adolescents are more prone to experimenting with substances like alcohol (Debenham et al., 2019). The higher prevalence of hazardous drinking among adolescents from larger families may stem from greater exposure to family members who consume alcohol (Rüütel et al., 2014). Among Dayak ethnic groups, the Iban showed a higher proportion of drinkers, consistent with research

conducted in Kapit's rural areas. The absence of Muslim drinkers in the study can be attributed to the strict enforcement of Sharia law, which prohibits alcohol consumption. Future studies should investigate whether Muslims who consume alcohol are more likely to engage in hazardous or low risk drinking compared to individuals of other religions.

Furthermore, the significant prevalence of alcohol use disorders among Dayak male adolescents may be explained by neurobiological vulnerabilities associated with developmental factors and an externalizing phenotype, which increases susceptibility to alcohol use. Stereotypical male gender roles also influence alcohol consumption (Dir et al., 2017). Cultural and social events, such as the Gawai festival, weddings, Christmas, and New Year's Eve, are often associated with alcohol consumption among Dayak adolescents. Despite these trends, most Dayak adolescents reported positive relationships with their parents and lived with their families, a factor that may contribute to higher exposure to alcohol consumption within family settings (Gahamat et al., 2023).

However, the study's findings are not generalizable to other Malaysian states due to demographic differences. The reliance on self-reported data for alcohol use disorder assessments may have introduced bias. Additionally, the cross-sectional design limits the ability to establish causal relationships between dependent and independent variables.

In a separate study, Nghitongo (2021) reported that 90.3% of 383 young adult respondents had consumed alcohol at some point, while 9.7% stated they had never consumed alcohol. Beer, wine, whisky, and cider were the most consumed beverages. Among the 9.7% of abstainers, reasons for avoiding alcohol included a lack of interest, concerns about its harmful effects, and religious beliefs tied to being born-again Christians. Both male and female respondents reported beginning alcohol consumption between the

ages of 16 and 18, with peer pressure cited as the primary reason, while adult influence was less significant.

Moreover, the study also revealed that 141 respondents consumed four or more alcoholic drinks per week, while 37 had never consumed alcohol. On average, 28.9% of respondents consumed 1–2 drinks per day, whereas 8.1% reported consuming 10 or more drinks daily. Most respondents indicated consuming six or more units of alcohol on at least one occasion monthly and reported drinking at licensed establishments within the past four months.

Nevertheless, the study had limitations. It focused exclusively on young adults aged 18–30, excluding the perspectives of individuals younger than 18 or older than 30, resulting in a sample that may not represent the broader population. Additionally, the research was confined to specific suburbs in Windhoek, providing only baseline data from those areas.

2.5 Relationship between Knowledge, Attitude and Practice towards Alcohol Consumption

Research by Lei et al. (2022) found that 34.4% of high school students (279 individuals) exhibited mild alcohol use disorder, while 3.6% (29 students) were classified with severe alcohol use disorder. The average scores among these students for alcohol-related knowledge, attitudes, and practices were 9.56 (±3.55), 4.96 (±2.36), and 2.81 (±1.29), respectively. A negative correlation was observed between students' alcohol-related knowledge, attitudes, and practices and their alcohol use disorder scores (r = -0.10, -0.39, -0.71, $P < 0.01$). Multivariate logistic regression revealed that higher scores in alcohol-related knowledge, attitudes, and practices (OR = 0.86, 95% CI = 0.83–0.89) and higher family

economic status (*OR* = 2.05, 95% *CI* = 1.26–3.32) were associated with mild alcohol use disorder. Similarly, lower scores in alcohol-related knowledge, attitudes, and practices (*OR* = 0.76, 95% *CI* = 0.70–0.83) and the type of school attended (*OR* = 3.72, 95% *CI* = 1.51–9.18) were linked to severe alcohol use disorder ($P < 0.05$). The study concluded that limited knowledge, negative attitudes, and poor practices related to alcohol are significantly correlated with alcohol use disorder. As such, targeted health education interventions, particularly for vocational school students and those from higher-income families, are essential to mitigate this issue.

Moreover, Rajakumari (2015) also explored these relationships in adolescent populations. The average knowledge score regarding alcohol consumption was 13.25, with a standard deviation of 7.63, while the mean attitude score was 24.3, with a standard deviation of 6.51. A statistically significant moderate positive correlation ($r = 0.26$, $p < 0.001$) was found between knowledge and attitudes. The study concluded that adolescents are more likely to develop negative attitudes toward alcohol consumption once they acquire sufficient knowledge on the subject. These findings emphasize the importance of equipping young individuals with an understanding of the complications and consequences of alcohol use, as this can encourage a more strategic approach to their personal and professional development.

Furthermore, Alves et al. (2021) demonstrated a correlation between knowledge and attitudes related to alcohol. The study revealed that an increase in alcohol-related knowledge correlates with both a higher likelihood of risky drinking ($r = 0.179$, $p < 0.001$) and stronger unfavourable attitudes toward alcohol ($r = 0.211$, $p < 0.001$). Similarly, university students with more negative attitudes toward alcohol were more prone to engaging in hazardous

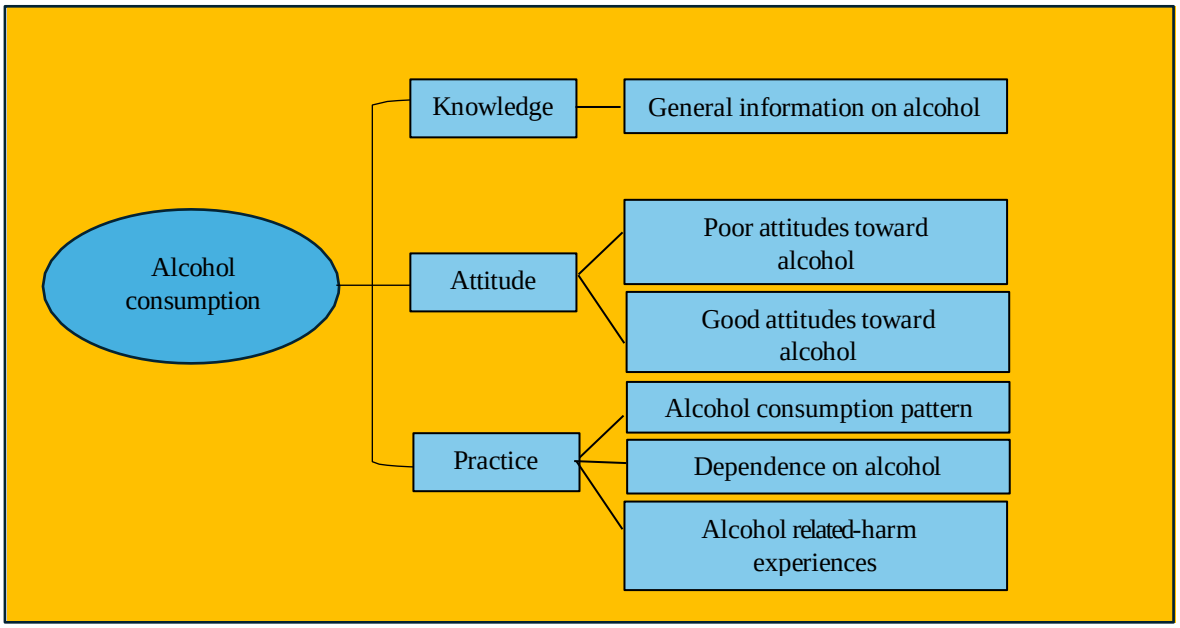
drinking behaviours ($r = 0.317$, $p < 0.001$). These findings highlight the complex interplay between knowledge, attitudes, and risky drinking behaviours, underscoring the need for targeted interventions to address these factors.

2.6 Conceptual Framework

The Iban community's knowledge, attitude and practice towards alcohol consumption can affect their quality of life, as well as their physical and mental health. Having adequate knowledge of general information and the effects of alcohol can prevent excessive consumption, thereby decreasing the likelihood of liver diseases, cardiovascular disease, and alcohol dependence. Moreover, positive attitudes will avoid impulsive or binge drinking, which promotes responsible behaviour. Knowledge influences attitudes by providing the Iban community with information regarding the outcomes of their actions, either positively or negatively. Also, knowledge influences attitudes, which subsequently shape practices. Favourable attitudes toward alcohol can encourage its use, whereas unfavourable attitudes may discourage it. In addition, practices are directly influenced by knowledge and attitudes. A person possessing adequate knowledge of alcohol-related risks may still partake in hazardous consumption even though they maintain a permissive attitude. Comprehensive knowledge, favourable attitudes and good practices foster the value of moderation, leading to a healthier environment for future generations. Figure 2.1 shows the conceptual framework of the study.

Figure 2.1

Conceptual framework of the study



2.7 Summary

In summary, there is a lack of research regarding the knowledge and attitudes of the Dayak community, especially the Iban community, concerning alcohol consumption. While numerous studies have been undertaken both locally and globally involving diverse community populations, including undergraduate students, healthcare providers, and caregivers regarding their knowledge, attitudes, and practices related to alcohol consumption, there exists a scarcity of research concentrating on the knowledge, attitudes and practices of the Iban community towards alcohol consumption in Malaysia, particularly in Sarawak. This study is essential to assess the knowledge, attitudes and practices regarding alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak. The prevalence of alcohol intake among the Iban community has been an ongoing concern in our society, highlighting the relevance of this investigation. Following this, measures can be

implemented to evaluate the understanding and perspectives regarding alcohol consumption among the Iban community. This approach will provide the Iban community with essential information concerning alcohol consumption. Subsequently, knowledge of the harmful impacts of excessive alcohol consumption is inconsistent among community members. Some individuals exhibit a clear awareness of associated risks, such as addiction and chronic health conditions, whereas others demonstrate a lack of comprehensive knowledge, explained by insufficient health education and limited access to resources. Alcohol consumption attitudes are influenced by cultural norms, peer dynamics, and personal experiences. The practices associated with alcohol consumption are a blend of modern challenges and tradition. Social drinking is still prevalent, particularly during festivals and gatherings, but there is also evidence of hazardous drinking patterns among specific individuals, which contribute to health, economic, and social issues within the community. Addressing alcohol-related challenges in the Iban community needs culturally sensitive interventions which adhere to traditional practices while fostering awareness, promoting responsible consumption, and ensuring access to support systems. Collaborative strategies that engage community leaders, healthcare providers, and educational initiatives are crucial for promoting healthier attitudes and practices related to alcohol consumption.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter describes the overall methodology for the research, divided into several sections: research design, research setting, inclusion and exclusion criteria, sampling method and sample size, study instrument, ethical considerations, data collection procedure, data analysis method, limitation, and summary.

3.2 Research Design

This study employed a cross-sectional quantitative research design to examine the relationship between knowledge, attitude, and practice towards alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak. Cross-sectional studies are observational investigations that examine data from a population at a specific point in time. These tools are frequently employed to assess the prevalence of health outcomes, analyse determinants of health, and characterise population attributes. Cross-sectional studies, in contrast to other observational study types, do not track individuals over time (Wang & Cheng, 2020). They are typically low-cost and straightforward to conduct. They serve to establish preliminary evidence for the planning of future advanced studies. Next, this study is quantitative research which emphasises the collection and analysis of data to develop deductive reasoning by investigating phenomena within the target population (Watson, 2015). This study employed a cross-sectional design to assess the prevalence of variables and their correlations and predict events based on existing data and knowledge (Curtis et al., 2016). This cross-sectional study selected respondents according to predefined inclusion and exclusion criteria. Cross-sectional studies are characterised by efficiency, cost-effectiveness, and straightforward implementation (Sedgwick, 2014). According to Thomas

(2020), cross-sectional studies are more cost-effective and time-efficient than other research methods, as data collection co-occurs. Therefore, a cross-sectional study design was selected for this research.

3.3 Research Setting

This study will be carried out within the Lubau Baru Longhouse, focusing on the Iban community at Betong, Sarawak, Malaysia. There are approximately 103 longhouse residents.

3.4 Population

The population consists of the entire Iban community residing in Lubau Baru Longhouse, Sarawak, totalling 121 residents. The target population is defined as individuals aged 18 years and above, ranging from adolescents to older adults, as they are the focus of this study on knowledge, attitudes, and practices related to alcohol consumption. No minors will be included in this study. From this target population, a sample size of 103 individuals will be selected for data collection and analysis.

3.5 Sampling

3.5.1 Inclusion and Exclusion Criteria

This study will exclusively engage the Iban community aged 18 years old and above, ranging from adolescents to older adults. The study included members of the Iban community who had resided in the region for a minimum of six months and had no history

of mental disability, physical impairment, or chronic diseases. In the meantime, the exclusion criteria included the longhouse residents who expressed a lack of willingness to take part in this study and no minors will be included in this study.

3.5.2 Sampling Method and Sample Size

The sample for the study comprised the Iban community from adolescents to older adults living at the Lubau Baru Longhouse, Sarawak. The sampling technique employed in this study was simple random sampling. Simple random sampling is a method of sampling that ensures everyone in a population has an equal probability of selection. This methodology generally produces a representative and unbiased sample (Frost, 2022). A population census will be undertaken to create a detailed enumeration of individuals. Random numbers were assigned to each member. A random number generator was utilized to select participants until the necessary sample size is achieved. The sample size was determined using the Taro Yamane (1973) formula. This method efficiently calculates the size of sample required for a study. The sample size calculation for this research project was determined by the total number of the Iban community who reside at the Lubau Baru Longhouse, Sarawak, N=103.

Table 3.1

Sample size calculation for the actual study

<table>
<tr><td colspan="2">Taro Yamane's formula:

$$n = \frac{N}{1 + N(e)^2}$$

Where n = the sample size

N = the population size

e = the acceptance sampling error

*95% confidence level and p = 0.05%</td></tr>
<tr><td>Calculation:

N = 234

$n = \frac{121}{1 + 121(0.05)^2}$

= 92.90

n = 93 participants</td><td>Attrition rate:

10% of the sample size

= sample size + (calculated sample size x 10%)

= 93 + (93 x 10/100)

= 93 + 9.3

= 102.3

=103 participants</td></tr>
</table>

The calculation determined that the study requires a sample size of 103 individuals. The ultimate sample size for this research consists of 103 individuals, which includes a 10% dropout rate. This aims to provide recompense for those volunteers who choose not to partake in the study.

3.6 Research Instrument

This study utilizes a questionnaire methodology that will be distributed in a tangible format, a printed hard-copy self-administered questionnaire, and personally delivered to participants. All questions will be in the national language Bahasa Melayu. Before utilising the questionnaire for this study, the questions need to be translated and adapted to align more effectively with the present investigation. Consent will be obtained from the study authors. The instruments will be categorized into four sections: A, B, C and D.

First, section A will present the participants' socio-demographic details, including their age group, gender, marital status, highest level of education, and occupation.

Moreover, section B will outline the degree of knowledge of the longhouse residents at Lubau Baru Longhouse in their understanding of alcohol consumption. There are a total of 15 adapted statements gained from open access, developed by Kumar (2006). This questionnaire comprised 15 items related to general information about alcohol, encompassing causes, practices, social acceptance and image, peer pressure, and consequences. Each statement presented a binary choice between the options "True" or “False". The items consisted of objective types requiring the selection of the most appropriate response for each item and the participants needed to tick (✓) their answer in the box provided. The ‘2 mark’ for the correct response and the ‘1 mark’ for the incorrect response. The lowest score recorded was 0, while the highest score was 30. A higher score indicated more knowledge.

Furthermore, section C consists of 15 items gained from open access and created by Kumar (2006) to evaluate the attitude toward alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak. A 3-Likert scale will be employed, where positive statements will be rated as Agree–3, Undecided–2, and Disagree–1, while negative statements will be rated as Agree–1, Undecided–2, and Disagree–3.

Moreover, section D will evaluate the practice towards alcohol consumption among the residents by using the Alcohol Use Disorder Identification Test (AUDIT) questionnaire obtained from WHO (2001). The instrument comprises 10 items that assess alcohol consumption, potential dependence on alcohol, and experiences of alcohol-related harm. It is appropriate for primary care, various healthcare environments, and epidemiological research. The reliability and validity of the instrument have been demonstrated across diverse contexts and countries (Pradhan et al., 2012). The residents' alcohol consumption will be categorized according to the AUDIT score as follows: no risk (0), low risk (1-7), hazardous (8-15), harmful (16-19), and dependence (greater than 20), following the WHO classification (Pradhan et al., 2012).

Additionally, to ensure participants from a rural Iban community clearly understand the study's objectives, methods, and implications, the researcher will use simple, culturally appropriate language and address all questions and concerns. The study's purpose will be explained directly and transparently. Participants will be invited personally, provided with printed self-administered questionnaires, and guided through the process. The researcher will also clarify the minimal risks associated with the study and emphasize that all information will remain private and confidential. To enhance understanding, visual aids such as posters will be utilized to communicate the study's purpose, objectives, methods, and implications. Additionally, the researcher will visit the community to explain these aspects in the

participants' native language, Iban, and seek the support of respected local leaders, such as the *tuai rumah*, to facilitate communication and build trust. Study materials, including consent forms, will be translated into the national language, Bahasa Melayu, and verbal translations will be provided for participants with limited literacy. Participants will be actively encouraged to ask questions and will receive clear, reassuring responses to help them feel confident about their involvement. After the explanation, participants will be asked to repeat key points in their own words to confirm their understanding. Any misunderstandings will be gently corrected, and further clarification will be provided if needed. Throughout the process, the researcher will respect participants' time, cultural practices, and decision-making processes, offering patience to those who require more time to fully understand the study.

Next, to prevent coercion or undue influence, the researcher will clearly state that participation is entirely voluntary and that participants may refuse or withdraw at any time without facing any consequences. Community leaders, such as the *tuai rumah*, will be advised not to pressure individuals to participate. Sufficient time will be given for participants and their parents to review the consent form and ask questions. Decisions will not be rushed, and discussions will occur privately to avoid peer pressure or undue influence in group settings. One-on-one conversations will ensure participants can fully understand the study and feel comfortable asking questions. The researcher will reassure participants and their parents that declining to participate will not affect their relationship with the researcher, community leaders, or any services provided. A mechanism, such as a contact number for an independent ethics committee, will be made available for participants or parents to report concerns or perceived pressure. Additionally, a pilot study will be conducted to identify and address any potential issues of influence or pressure.

Furthermore, to safeguard participants' rights, the researcher will ensure that informed consent is fully understood by all participants. This will include clear explanations of the study's purpose, methods, risks, and benefits in the participants' preferred language. Ample time will be provided for participants to ask questions and make decisions without pressure. The researcher will accurately verify the participants' ages to exclude minors from the study. Strict data protection measures will be implemented to ensure confidentiality, and participants will be reminded that their involvement is voluntary, and they may withdraw at any time without penalty. Using culturally sensitive communication, the researcher will strive to ensure participants feel respected, valued, and comfortable throughout the process.

3.7 Ethical Consideration

A letter of ethical approval was granted by the Research and Ethics Committee of the Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak (UNIMAS) before the study was conducted. Formal informed consent will be obtained from participants who are willing to participate in this study. The participants will have the right to withdraw from this study at any time without consequences or penalties. Additionally, the author will receive a formal letter of consent via email to obtain permission for the questionnaire tools that will be utilized in this study. Also, the Village Head of the Lubau Baru Longhouse was formally informed and provided with an official letter to request permission to conduct this study. Each questionnaire used for data collection was accompanied by a letter providing information about the research, the purpose of the study, an explanation of data confidentiality, and a statement of the respondents' consent, with all data used solely for research purposes. All information obtained from responses will remain strictly confidential.

3.8 Data Collection Procedure

3.8.1 Pilot Study

A pilot study was conducted to assess the reliability and validity of the questionnaire. This pilot study will determine the feasibility of the research. Furthermore, the pilot study will be conducted to determine whether the measuring instrument contains flaws (Srinivasan & Lohith, 2017). A total of 10 participants from the target population of interest who will meet the inclusion and exclusion criteria will be recruited for the pilot study. Hertzog (2008) suggests that a sample size of 10 or fewer will be adequate to evaluate the clarity of the instruction in the questionnaire, comprising both females and males. To prevent bias, individuals who have completed the questionnaires will be excluded from actively participating in the study. The data from the pilot study were entered into and analyzed using SPSS version 27 to evaluate the reliability of the questionnaire items. Cronbach's alpha will evaluate the internal consistency and reliability of the research instruments. A Cronbach's alpha of 0.7 or higher signifies acceptable reliability (Heale & Twycross, 2015). Cronbach's alpha values are categorized as acceptable within the range of 0.6 to 0.7, while values of 0.8 or higher indicate a good level of reliability, and values exceeding 0.9 are considered excellent. In this pilot study, the Cronbach's alpha for the knowledge tools was 0.71, for the attitude tools was 0.89, and for the practice tools was 0.72. Hence, both questionnaires were acceptable and good to be used for this research.

Furthermore, to perform the pilot study, 10% of the sample was selected to participate. The sample size of this study was 103 participants. Therefore, 10% of the sample size was $10.3 \approx 11$ participants. In conclusion, 11 residents at Lubau Baru Longhouse who met the inclusion criteria were selected to participate in the pilot study using the same sampling

method as the actual study. The 11 participants were excluded from the main study. The data collected from the pilot study were excluded from the analysis of the actual study.

Additionally, this pilot study employed face validity. Taherdoost (2016) defines face validity as the extent to which a measure is perceived by non-experts, such as test-takers, to be relevant to a specific construct. Face validity is defined as the degree to which test-takers will evaluate the content and items in the questionnaire as relevant to the context in which the test will be administered. Face validity was assessed through a pilot study, which will provide feedback on whether the questionnaire accurately reflects the research objectives (Bhandari, 2022). This pilot study measured and discussed the face validity of the questionnaires with the supervisor before distributing them to the pilot study participants. This pilot study provided feedback from the participants regarding the clarity of the questionnaire for future improvements. Some participants commented that the questionnaires provided were user-friendly, systematic, and structured, in the Malay language that is easy to understand. Therefore, the pilot study had high face validity.

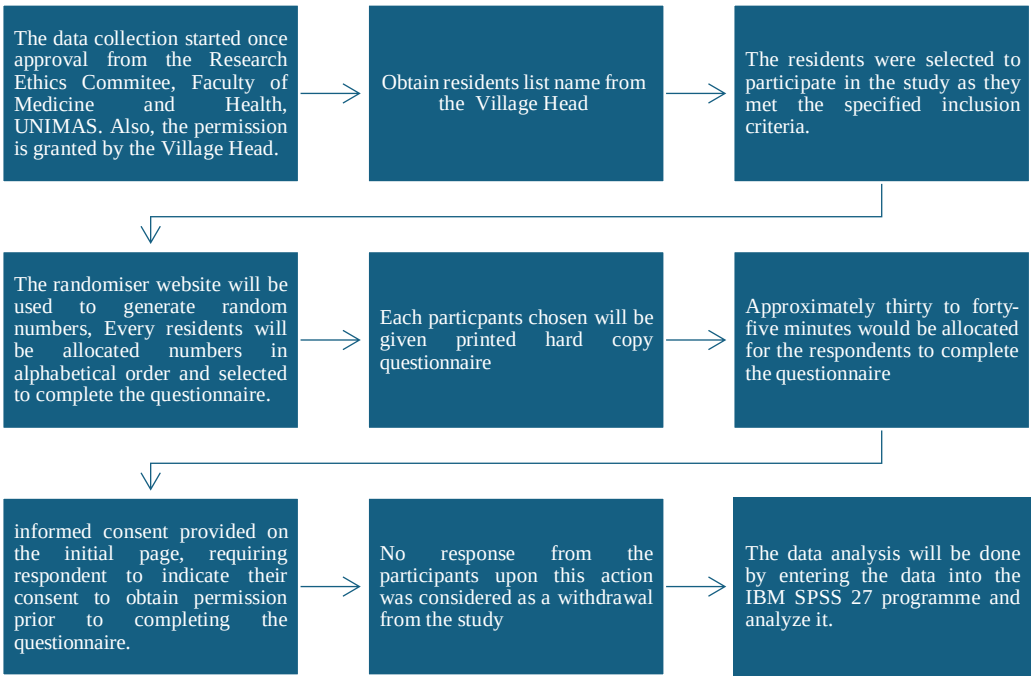
3.8.2 Actual Study

This research used a simple random sampling technique to draw samples from the population. The criteria for inclusion and exclusion were created to describe the target population of the study. The sample size consisted of 103 of the population, which is the Iban community residing at the Lubau Baru longhouse, who fulfilled the specified inclusion criteria. The sample size was determined to be 103 participants, calculated using the Taro Yamane Formula (1973). This research utilized a self-administered questionnaire, which has been prepared in the Malay language. The printed hard-copy self-administered questionnaires were administered to the participants and subsequently collected

after 30 to 45 minutes. Participants filled out informed consent, indicating their willingness to engage and their comprehension of their rights within the context of this research endeavour. The contact number of the researcher was included in the consent form to facilitate communication with participants regarding any enquiries related to the questionnaire. A participant's refusal to respond to this action will be regarded as a withdrawal from the study.

Figure 3.1

Flow of data collection procedure during the actual study



3.9 Data Analysis

The data collected in this study were analyzed using statistical software, specifically IBM's Statistical Package for Social Sciences (SPSS) version 27. The data was presented using descriptive analysis. Descriptive statistics were utilized to analyze sociodemographic data, including levels of knowledge, attitude and practices. The results were presented as means, percentages, and frequency distributions to illustrate the sociodemographic data, knowledge levels, attitudes and practices towards alcohol consumption among the Iban community at Lubau Baru longhouse. The Kolmogorov-Smirnov test was employed to determine the normality of the data. This test was chosen due to its sample size exceeding 50 individuals, making it appropriate for this investigation. Mishra et al. (2019) stated that a *p*-value larger than 0.05 suggests that the data will be deemed to have a normal distribution. A *p*-value below 0.05 indicates the data will not follow a normal distribution. Descriptive and inferential statistics were used to illustrate the sample's characteristics through the frequency, percentage, mean, and standard deviation of the variable. Continuous data that is normally distributed will be reported as mean and standard deviation. Continuous data that is not normally distributed will be reported as median and interquartile range. Parametric tests will be employed when the data are normally distributed, including the T-test for two variables and ANOVA for three variables. The Pearson correlation test will be utilised for assessing relationships between variables. If the data are not normally distributed, non-parametric tests such as the Chi-square test, Mann-Whitney test (for two variables), and Kruskal-Wallis H test (for three variables) will be employed, along with Spearman's rank correlation for collection analysis. In addition, the Pearson Correlation test will be employed to assess the relationship between the level of knowledge and attitudes towards alcohol consumption in cases where the data is normally distributed (Schober et al., 2018). In contrast, Daines (2024) indicates

that Spearman's Rank Order Correlation will be applied when one of the data sets is not normally distributed and the data will not meet the necessary assumption requirements. In this study, the data for knowledge, attitude and practice were not normally distributed. Hence, Spearman's Rank Older Correlation is applied to test the relationship between knowledge, attitude and practice of alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak.

3.9.1 Summary

This study was conducted using a quantitative approach with a cross-sectional study design. The study was carried out at Lubau Baru Longhouse, Sarawak, and involved residents from the Iban community. Simple random sampling was employed to select the participants. The sample size was calculated using the Yamane formula (1973), resulting in a total of 103 respondents. A self-administered questionnaire consisting of four sections was used as the study instrument. Ethical approval and permission were obtained prior to data collection. Data were analysed using IBM SPSS version 27. The study faced several limitations, including time constraints, limited generalisability of the findings, the researcher's inexperience, and the lack of published literature on this topic in Malaysia, particularly in Sarawak.

CHAPTER 4: RESULTS

4.0 Introduction

This chapter presents the findings obtained from 98 residents of Lubau Baru Longhouse. The results are organized according to the research objectives, which are: to assess the level of knowledge regarding alcohol consumption, examine attitudes toward alcohol consumption, to evaluate practices related to alcohol use, and examine the relationship between knowledge, attitude, and practice among the residents. Section 4.1 outlines the socio-demographic characteristics of the Lubau Baru Longhouse residents. Section 4.2 discusses their level of knowledge about alcohol consumption. Section 4.3 focuses on their attitudes toward alcohol use. Section 4.4 examines their practices related to alcohol consumption. Section 4.5 explores the relationship between knowledge, attitude, and practice of alcohol consumption among the Lubau Baru Longhouse residents. Finally, Section 4.6 provides a summary of the chapter.

4.1 Socio-Demographic Characteristics of Lubau Baru Longhouse Residents

A total of 98 Lubau Baru Longhouse residents were recruited. In this study, there were 51 males (52%) and 47 females (48%) (refer to Figure 4.1.1 below). The highest age group of participants were 60 years and above, 28.6% (*n = 28*), while the lower participants' age group were from 14.3% of the 50-59 years old age group (*n* = 14). The maximum age group is 60 years old and above, while the minimum age is 18 years old. Participants' mode age group was 60 years old and above. No outliers or extreme values were screened from this data. For participants' marital status, most of the participants were married, 61.2% (*n = 60),* followed by single, 26.5% (*n* = 26), widow/widower, 7.1% (*n* = 7), and divorced, 5.1% (*n* = 5) (refer to Figure 4.1.2 below). Next, most participants finished their secondary school as highest level of education, 46.9% (*n* = 46), followed by

others, which is the tertiary level, such as a form six, diploma and a bachelor's degree, 30.6% (*n* = 30), and some participants only finished their education until primary school, 22.4% (*n* = 22). For occupation, most participants were employed, 35.7% (*n* = 38), followed by unemployed, 22.4% (*n* = 22), agriculturist, 19.4% (*n* = 19), self-employed/business, 15.3% (*n* = 15) and student, 7.1% (*n* = 7) (refer to Table 4.1 below).

Figure 4.1.1: *Frequency distribution of participants by gender and age group (n=98)*

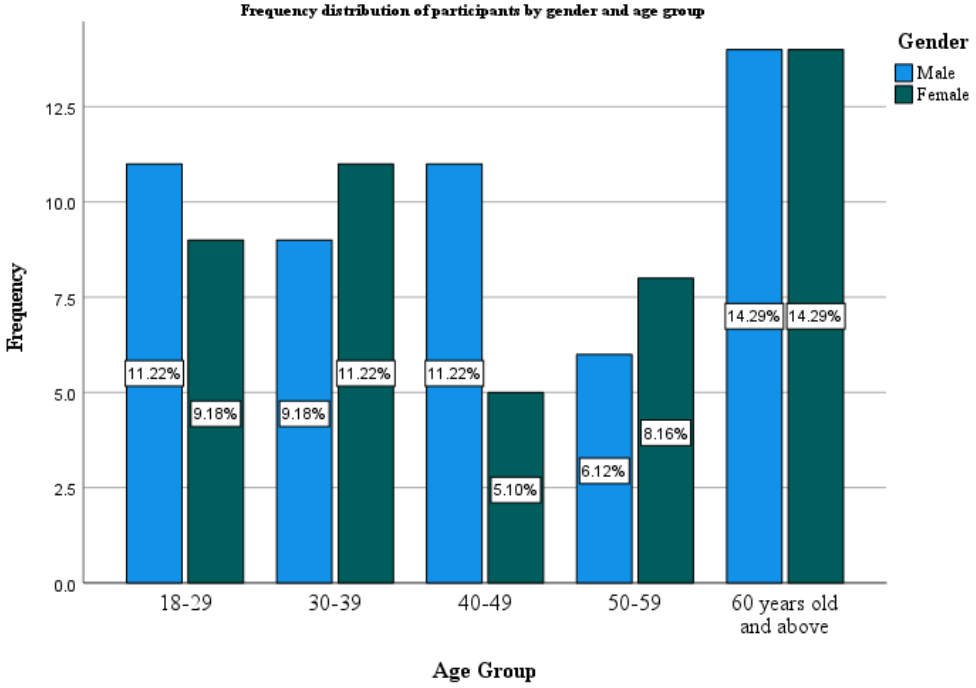


Figure 4.1.2: *Percentage distribution of participants by marital status (n=98)*

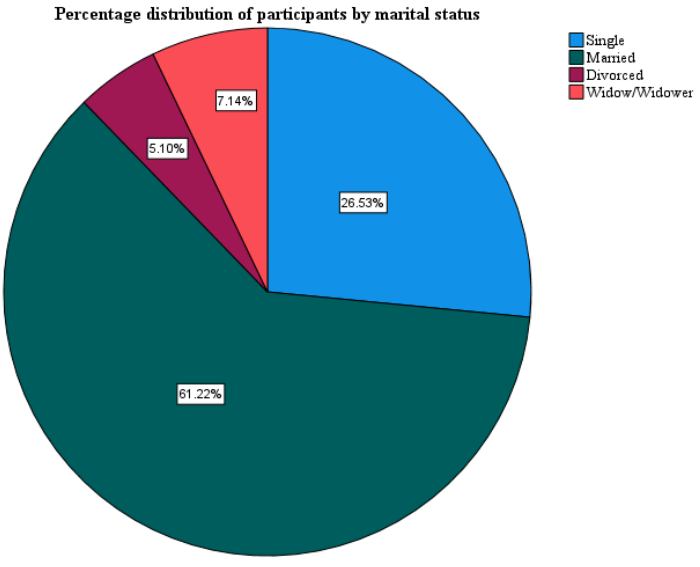


Table 4.1: *Socio-demographic variables of Lubau Baru Longhouse residents (n=98)*

Description	Frequency (*n*)	Percentage (%)	Mean ($\bar{x}$)	Std. Deviation (*SD*)
Age Group				
18-29	20	20.4		
30-39	20	20.4		
40-49	16	16.3	3.10	1.523
50-59	14	14.3		
60 years old and above	28	28.6		
Gender				
Male	51	52	1.48	.502
Female	47	48		
Marital Status				
Single	26	26.5		
Married	60	60.2	1.93	.777
Divorced	5	5.1		
Widow/Widower	7	7.1		
Highest level of education				
Primary school	22	22.4		
Secondary school	46	46.9	3.08	.728
Other	30	30.6		
Occupation				
Student	7	7.1		
Employed	22	22.4		
Unemployed	35	35.7	3.17	1.193
Self-employed/Business	15	15.3		
Agriculturist	19	19.4		

4.2 The Level of Knowledge on Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak

The descriptive analysis of each knowledge on alcohol consumption components is presented in Table 4.2. A Kolmogorov-Smirnov test showed the data is not normally distributed, $D(98) = .112$, $p = .004$. One question had the highest correct response, accounting for 78 (79.6%) respondents. This result shows that most respondents are aware that beer generally contains between 2% and 12% alcohol by volume, as they have answered correctly to the question of, "Beer usually contains from 2–12% alcohol by volume". Another statement with the highest correctly answered among 76 (76.5%) of the respondents is the question regarding, "Many people drink to overcome problems, loneliness and depression.". This proved that the respondents were aware that people often consume alcohol to cope with problems, feelings of loneliness, and depression. For the two questions mentioned, only 20 (20.4%) and 23 (23.5%) of respondents were unable to answer correctly. Meanwhile, the highest incorrect response was "Alcohol is usually classified as a stimulant", with 62 (63.3%) of them answering incorrectly, while only 36 (36.7%) were correct for the question. Moreover, the highest mean score found in the study was the question with "Drinking milk before drinking an alcoholic beverage will slow the absorption of alcohol into the body" (1.66, $SD = 0.475$), meanwhile, the lowest mean score was the question of "Beer usually contains from 2–12% alcohol by volume" (1.20, $SD = 0.405$). Recoding knowledge score into the level of knowledge was done using the visual binning in SPSS. Out of the 98 participants, it was revealed that 6 (6.1%) of the participants have good knowledge, and moderate knowledge 84 (85.7%) while 8 (8.2%) respondents have poor knowledge on alcohol consumption. The overall total mean score in these 15-item questions on alcohol consumption knowledge was 21.26, and the standard deviation of 1.97. The median score among the participants is 21 points ($IQR = 2.25$). The

maximum score is 26 points while the minimum score is 17 points. The range is 9 points. The mode score is 22 points.

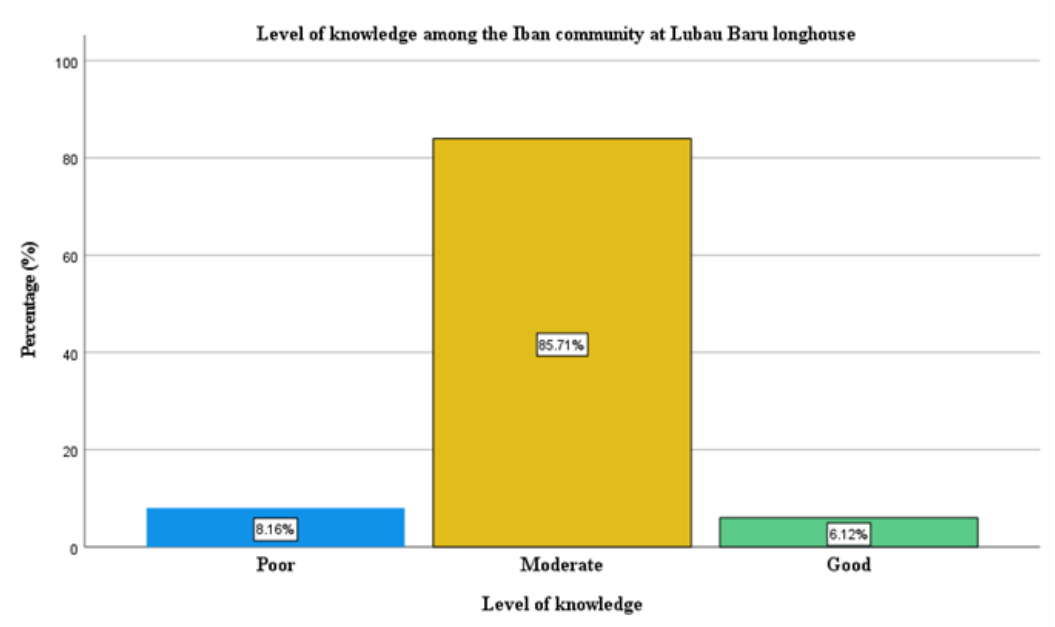
Table 4.2: *Descriptive of knowledge on the alcohol consumption questionnaire's component among Lubau Baru Longhouse residents (n=98)*

		Frequency (*n*)	Percentage (%)	Mean + *SD*
Alcohol is usually classified as a stimulant.	True	62	63.3%	1.37 (0.485)
	False	36	36.7%	
Alcohol is not a drug.	True	59	60.2%	1.40 (0.492)
	False	39	39.8%	
Approximately 10% of fatal highway accidents are alcohol related.	True	72	73.5%	1.27 (0.444)
	False	26	26.5%	
Many people drink to overcome problems, loneliness and depression.	True	75	76.5%	1.23 (0.426)
	False	23	23.5%	
A person cannot become an alcoholic by just drinking beer.	True	48	49.0%	1.51 (0.502)
	False	50	51.0%	
Moderate consumption of alcoholic beverages is generally not harmful to the body.	True	46	46.9%	1.53 (0.502)
	False	52	53.1%	
Many people drink for social acceptance, because of peer group pressures, and to gain adult status.	True	74	75.5%	1.24 (0.432)
	False	24	24.5%	
There is usually more alcoholism in a society that accepts drunken behaviour than in a society that frowns on drunkenness.	True	43	43.9%	1.56 (0.499)
	False	55	56.1%	
Eating while drinking will not slow down the absorption of alcohol in the body.	True	36	36.7%	1.63 (0.485)
	False	62	63.3%	
It is estimated that approximately	True	71	72.4%	1.28

85% of the adults who drink misuse or abuse alcoholic beverages.	False	27	27.6%	(0.449)
Drinking milk before drinking an alcoholic beverage will slow the absorption of alcohol into the body	True False	33 65	33.7% 66.3%	1.66 (0.475)
Beer usually contains from 2–12% alcohol by volume.	True False	78 20	79.6% 20.4%	1.20 0.405
Drinking coffee or taking a cold shower can be an effective way of sobering up.	True False	51 47	52.0% 48.0%	1.48 (0.502)
Liquor taken straight will affect you faster than liquor mixed with water.	True False	64 34	65.3% 34.7%	1.35 (0.478)
Alcohol has only been used in a very few societies throughout history.	True False	45 53	45.9% 54.1%	1.54 (0.501)

SD = Standard deviation

Figure 4.2: *Level of knowledge on alcohol consumption among the Iban Community at Lubau Baru Longhouse (n = 98)*



4.3 The Attitude on Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak

Based on Table 4.3, the statement with the highest mean score was "Alcoholism is one of the main reasons for crime in the society" (2.84, *SD* = 0.646), followed by "Alcoholism results in many diseases" (2.83, *SD* = 0.746). Meanwhile, the statements with the lowest mean score were "Alcohol helps to get rid of the difficulties of life" (1.36, *SD* = 0.439). The highest response to the statement was "Alcoholics are problematic to their families and to the society", whereby 80.6% (*n* = 79) of the respondents chose "Agree" as their answer.

Table 4.3 *Descriptive of attitude on the alcohol consumption questionnaire's component among Lubau Baru Longhouse residents (n=98)*

		Frequency (*n*)	Percentage (%)	Mean + *SD*
Alcohol addiction destroys the life of the user.	Agree	69	70.4%	2.65 (0.572)
	Undecided	24	24.5%	
	Disagree	5	5.1%	
It is better to keep away from an alcoholic.	Agree	66	67.3%	2.60 (0.622)
	Undecided	25	25.5%	
	Disagree	7	7.1%	
There is nothing wrong in accepting your brother or sister, if he/she is alcoholic.	Agree	57	58.2%	2.33 (0.459)
	Undecided	16	16.3%	
	Disagree	25	25.5%	
Alcoholism is a must for today's lifestyle.	Agree	16	16.3%	1.50 (0.753)
	Undecided	17	17.3%	

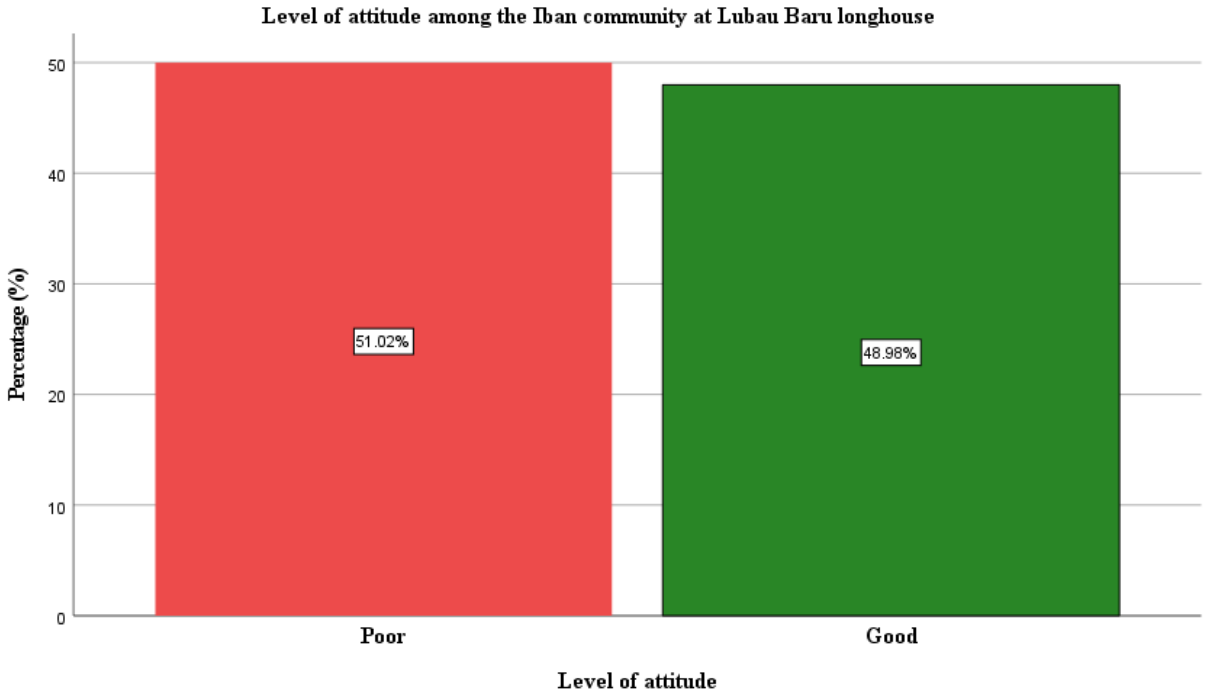
	Disagree	65	66.3%	
Alcoholism is an immoral act	Agree	76	77.6%	
	Undecided	13	13.3%	2.68 (0.636)
	Disagree	9	9.2%	
Alcohol can make a person a	Agree	16	16.3%	
more creative thinker.	Undecided	13	13.3%	1.46 (0.762)
	Disagree	69	70.4%	
Alcoholics are problematic to	Agree	79	80.6%	
their families and to the	Undecided	9	9.2%	2.70 (0.646)
society.	Disagree	10	10.2%	
It is possible to come out of	Agree	73	74.5%	
alcoholism.	Undecided	12	12.2%	2.61 (0.713)
	Disagree	13	13.3%	
Alcohol is necessary to	Agree	33	33.7%	
celebrate any event.	Undecided	14	14.3%	1.80 (0.912)
	Disagree	51	52.0%	
Alcoholism will affect	Agree	80	81.6%	
financial status of the family.	Undecided	12	12.2%	2.76 (0.517)
	Disagree	6	6.1%	
Alcoholism is one of the main	Agree	86	87.8%	
reasons for crime in the	Undecided	9	9.2%	2.84 (0.439)
society.	Disagree	3	3.1%	

Alcohol helps to get rid off the difficulties of life.	Agree	9	9.2%	
	Undecided	17	17.3%	1.36 (0.646)
	Disagree	72	73.5%	
Alcohol use helps to attain adult status soon.	Agree	15	15.3%	
	Undecided	12	12.2%	1.43 (0.746)
	Disagree	71	72.4%	
Alcoholism results in many diseases.	Agree	84	85.7%	
	Undecided	11	11.2%	2.83 (0.455)
	Disagree	3	3.1%	
Drinking and driving is an adventurous act.	Agree	28	28.6%	
	Undecided	17	17.3%	1.75 (0.877)
	Disagree	53	54.1%	

A Kolmogorov-Smirnov test showed the attitude score is not normally distributed, $D(98) = .099$, $p = .019$. The total mean score for the 15-item questions on the attitude score was 33.32, and the standard deviation of 2.56. The total mean score for the 15-item questions on the attitude scale was 10.89, and the standard deviation of 5.61. The median score among the participants is 33 points ($IQR = 3$). The maximum score is 40 points while the minimum score is 28 points. The range is 12 points. The mode score is 34 points. Each statement was graded with a 3-Likert scale ranging from 1 for disagree, 2 for undecided, and 3 for agree. Next, the total score of each respondent was calculated in SPSS and then categorised as either a good or poor attitude using visual binning. The level of attitude towards alcohol consumption was divided into 2 levels: 1) poor attitude with a score of below 33, and good attitude with a score of 34 and above. The findings also reveal that most

of the respondents scored poor attitudes, 50 (51.0%), towards alcohol consumption; meanwhile, 48 (49.0%) of them scored good attitudes.

Figure 4.3: *Level of attitude on alcohol consumption among the Iban Community at Lubau Baru Longhouse (n = 98)*



4.4 The Level of Practice on Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak

Table 4.4 presents the level of practice on alcohol consumption in the Iban community at Lubau Baru longhouse. A Kolmogorov-Smirnov test showed the practice score is not normally distributed, $D(98) = .146$, $p = <.001$. Overall, most of the participants, 44.9% ($n = 44$), have a good level of practice on alcohol consumption. Out of 98 participants, the majority, 67.3% (n = 66), drank alcohol monthly or less, while there were no participants who never ($n = 0$) drank alcohol and drank 4 or more times a week ($n = 0$). However, there were 9.2% participants ($n = 9$) who drank alcohol 2-3 times a week as they answered the question of, "How often do you have a

drink containing alcohol?" In addition, most of the participants, 46.9% (n = 46), had previously caused injury to themselves or others because of their drinking, but not within the past year, while there were only 10.2% (n = 10) who had injured or caused injury to others within this past year and 42.9% (n = 42) of participants never injured themselves and others because of their drinking. In the past year, 52% of participants (n = 51) reported that a relative, friend, doctor, or other health worker had expressed concern about their alcohol consumption and suggested they cut down. Additionally, 32.7% of participants (n = 32) indicated that such concerns had been raised, but not within the past year. Meanwhile, 15.3% of participants (n = 15) stated that no one had ever expressed concern about their drinking or advised them to reduce their alcohol intake. These responses were based on the question: "Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?" Moreover, the total mean score for the 10-item questions on the practice score was 10.89, and the standard deviation of 5.61. The median score among the participants is 10 points (IQR = 9). The maximum score is 24 points, while the minimum score is 1 point. The range is 23 points. Next, the total score of each respondent was calculated in SPSS and then categorised as no risk, low risk, hazardous, harmful or dependence using visual binning. The findings reveal that most participants (44.9%, n = 44) demonstrated low-risk alcohol consumption practices. Additionally, 15.3% (n = 15) exhibited hazardous drinking practices. Furthermore, 30.6% of participants (n = 30) engaged in harmful drinking practices, while 9.2% (n = 9) showed patterns of alcohol dependence.

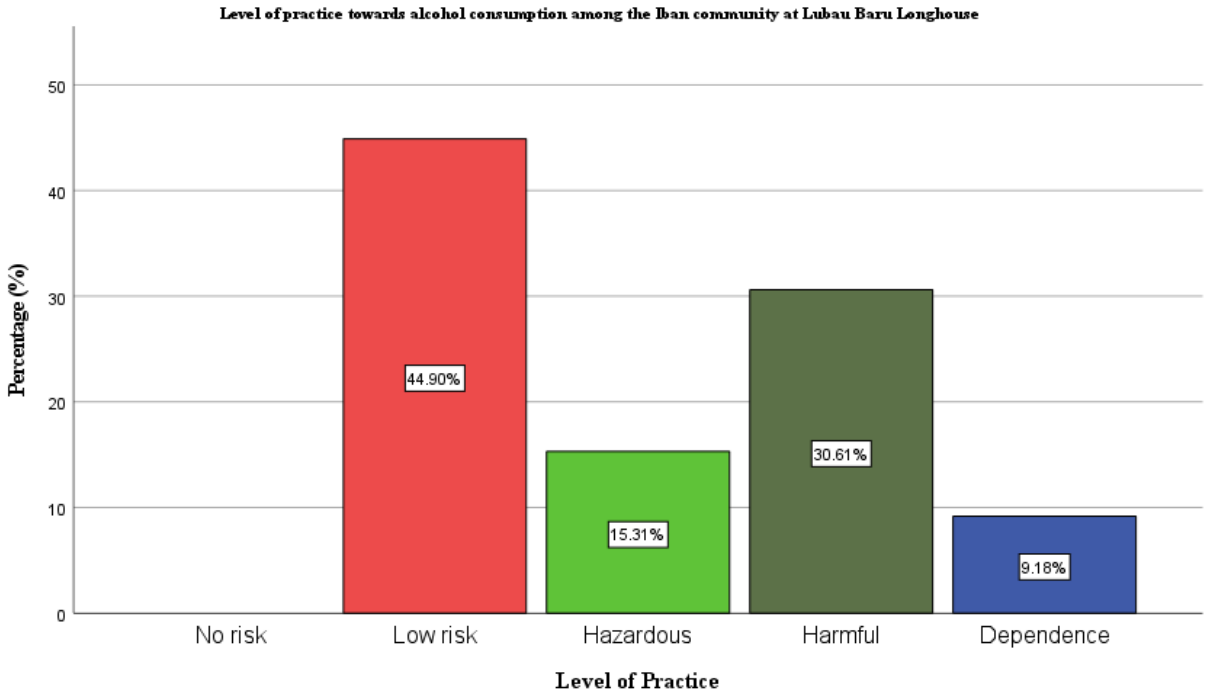
Table 4.4: *Descriptive of practice on the alcohol consumption questionnaire's component among Lubau Baru Longhouse residents (n = 98)*

		Frequency (n)	**Percentage (%)**	**Mean + *SD***
How often do you have a drink containing alcohol?	Never	0	0.0%	2.58 (0.656)
	Monthly or less	66	67.3%	
	2-4 times a month	23	23.5%	
	2-3 times a week	9	9.2%	
	4 or more times a week	0	0.0%	
How many standard drinks containing alcohol do you have on a typical day when drinking?	1 or 2	29	29.6%	2.97 (0.861)
	3 or 4	44	44.9%	
	5 or 6	19	19.4%	
	7,8 and 9	6	6.1%	
	10 and more	0	0.0%	
How often do you have six or more drinks on one occasion?	Never	27	27.6%	2.99 (0.779)
	Less than monthly	45	45.9%	
	Monthly	24	24.5%	
	Weekly	2	2.0%	
	Daily or almost daily	0	0.0%	
During the past year, how often	Never	51	52.0%	
	Less than monthly	36	36.7%	1.50

have you found that you were not able to stop drinking once you had started?	Monthly	9	9.2%	(0.763)
	Weekly	2	2.0%	
	Daily or almost daily	0	0.0%	
During the past year, how often have you failed to do what was normally expected of you because of drinking?	Never	39	39.8%	2.68
	Less than monthly	50	51.0%	(0.636)
	Monthly	8	8.2%	
	Weekly	1	1.0%	
	Daily or almost daily	0	0.0%	
During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?	Never	61	62.2%	1.46
	Less than monthly	32	32.7%	(0.762)
	Monthly	5	5.1%	
	Weekly	0	0.0%	
	Daily or almost daily	0	0.0%	
During the past year, how often have you had a	Never	19	19.4%	2.70
	Less than monthly	61	62.2%	(0.646)
	Monthly	18	18.4%	

feeling of guilt or remorse after drinking?	Weekly	0	0.0%	
	Daily or almost daily	0	0.0%	
During the past year, have you been unable to remember what happened the night before because you had been drinking?	Never	48	49.0%	2.61
	Less than monthly	41	41.8%	(0.713)
	Monthly	7	7.1%	
	Weekly	1	1.0%	
	Daily or almost daily	1	1.0%	
Have you or someone else been injured as a result of your drinking?	Never	42	42.9%	2.65
	Yes, but not in the last year	46	46.9%	(1.309)
	Yes, during the last year	10	10.2%	
Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?	Never	15	15.3%	1.27
	Yes, but not in the last year	32	32.7%	(1.476)
	Yes, during the last year	51	52.0%	

Figure 4.4: *Level of practice on alcohol consumption among the Iban Community at Lubau Baru Longhouse (n = 98)*



4.5 Relationship between Knowledge, Attitude, and Practice towards Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak

The relationship between knowledge, attitude, and practice score was investigated using the Spearman correlation coefficient. Preliminary analysis was performed, and the normality test revealed that the distribution of the data was not normally distributed. Leclezio et al. (2015) described that the strength of correlation r = 0.01-0.19 indicated no/negligible relationship, 0.20-0.29 indicated weak relationship, 0.30-0.39 indicated moderate relationship, 0.40-0.69 indicated strong relationship, >0.70 indicated very strong relationship.

Moreover, analysis revealed there was a correlation between the two variables, knowledge and attitude. The result revealed a significant correlation between knowledge and attitude. There was no or negligible positive correlation between the two variables, $r(98)$ =

.014, p = 0.893, with poor attitude (*Mdn* = 33) associated with moderate knowledge (*Mdn* = 21).

Next, the analysis revealed there was a correlation between the two variables, knowledge and practice. The result revealed a significant correlation between knowledge and practice. There was no or negligible positive correlation between the two variables, $r(98) = .076$, $p = .46$, with moderate knowledge (*Mdn* = 21) associated with low-risk practice (*Mdn* = 10).

Furthermore, analysis revealed there was a correlation between the two variables, attitude and practice. The result revealed a significant correlation between attitude and practice. There was a weak positive correlation between the two variables, $r(98) = .20$, p = .064, with poor attitude (*Mdn* = 33) associated with low-risk practice (*Mdn* = 10).

Table 4.5: *Relationship between knowledge, attitude, and practice towards alcohol consumption among the Iban Community at Lubau Baru Longhouse, Sarawak*

Correlations

			Knowledge	Attitude	Practice
Spearman's rho	Knowledge	Correlation Coefficient	1.000	.014	.076
		Sig. (2-tailed)	.	.893	.460
		N	98	98	98
	Attitude	Correlation Coefficient	.014	1.000	.188
		Sig. (2-tailed)	.893	.	.064

	N	98	98	98
Practice	Correlation Coefficient	.076	.198	1.000
	Sig. (2-tailed)	.460	.064	.
	N	98	98	98

4.6 Summary

This chapter summarizes the study's key findings. The results indicate that most residents of the Iban community at Lubau Baru Longhouse demonstrated a moderate level of knowledge about alcohol consumption, with a mean score of 21.26 (*SD* = 1.97). Notably, 85.7% of respondents (*n* = 84) scored above 17, representing over 50% of the maximum possible score and confirming moderate knowledge levels. Regarding attitude, 51% of respondents (*n* = 50) exhibited a poor attitude towards alcohol consumption, while 49% (*n* = 48) demonstrated a good attitude. The mean attitude score was 33.32 (*SD* = 2.56). In terms of practice, 44.9% of participants (*n* = 44) reported engaging in low-risk alcohol consumption. Conversely, 15.3% (*n* = 15) reported hazardous drinking behaviours, 30.6% (*n* = 30) exhibited harmful drinking patterns, and 9.2% (*n* = 9) showed signs of alcohol dependence. These results indicate a range of alcohol consumption behaviours, with a substantial proportion displaying risky or harmful drinking patterns. The mean practice score was 10.89 (*SD* = 5.61). To examine the relationships between knowledge, attitude, and practice, Spearman's rank-order correlation analyses were performed. The results showed negligible correlations between knowledge and attitude, as well as between knowledge and practice. However, a weak positive correlation was identified between attitude and practice, suggesting that a more positive attitude towards alcohol consumption is slightly associated with safer drinking practices.

CHAPTER 5: DISCUSSION

5.0 Introduction

This chapter presents the findings of the study, organized according to the research objectives. The purpose of this study is to examine the level of knowledge, attitude and practice towards alcohol consumption among the Iban community at Lubau Baru Longhouse, as well as to examine the relationship between knowledge, attitude and practice of alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak. This chapter will provide an in-depth discussion on the level of knowledge about alcohol consumption, attitudes towards alcohol consumption, level of practice towards alcohol consumption and the relationship between these three variables. Additionally, the key results are summarized, followed by recommendations based on the study's implications. Finally, this chapter addresses the limitations encountered during the research and concludes with a summary of the overall study.

5.1 Level of Knowledge on Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak

The Iban community at Lubau Baru Longhouse revealed varying levels of knowledge regarding alcohol consumption. Only 6.1% of participants demonstrated good knowledge, while a significant majority, 85.7%, exhibited moderate knowledge. Meanwhile, 8.2% of respondents had poor knowledge about alcohol use.

Next, most participants demonstrate moderate knowledge of alcohol consumption due to various educational, cultural, and structural factors that limit their full understanding of its risks. In many rural and underserved settings, access to targeted health education is insufficient, resulting in only partial awareness of alcohol-related harms. For example, George et al. (2020) found that men in rural South India had a general awareness of alcohol's health effects but lacked detailed knowledge due to limited structured education. Cultural acceptance of heavy

drinking further reinforces this limited understanding; in rural Australian communities, alcohol use is normalized as part of social life, reducing the urgency to deepen knowledge (Room et al., 2019).

Moreover, these findings align with broader research on alcohol consumption among rural communities in Sarawak. For instance, a study by Amit (2017) highlighted that Iban men in rural areas reported higher alcohol use compared to other ethnic groups, influenced by cultural practices and social norms. Additionally, the availability of traditional alcoholic beverages like *tuak* and *langkau*, often consumed during social gatherings, contributes to the normalisation of alcohol use within these communities.

Furthermore, educational attainment and health literacy also shape this issue, as lower levels of formal education are linked to only superficial awareness of alcohol's dangers (Williams et al., 2015). Additionally, generic or culturally disconnected public health campaigns often fail to address local contexts effectively, limiting their impact even among university students who may still retain incomplete knowledge despite prevention efforts (Messina et al., 2022).

In addition, most participants had moderate knowledge of alcohol consumption, indicating that public health messaging in rural Sarawak is often limited in scope and reach, contributing to low levels of alcohol-related health literacy, particularly among communities that maintain strong traditional practices (Ajan et al.,2023). Although individuals with secondary or tertiary education are more likely to consume alcohol, research indicates that higher educational attainment does not necessarily correlate with a deeper understanding of its associated health risks (Musa et al., 2022).

Therefore, the moderate level of knowledge observed among the participants at Lubau Baru Longhouse suggests a need for targeted educational interventions. Enhancing awareness about the health risks associated with excessive alcohol consumption and promoting informed

decision-making could be beneficial. Such initiatives should be culturally sensitive and consider the traditional practices and beliefs of the Iban community to ensure effectiveness.

However, 8 participants (8.2%) were found to have poor knowledge of alcohol consumption. This finding reflects a broader issue commonly observed in rural areas of Sarawak, where access to accurate health information is often limited. Many rural communities face challenges in obtaining reliable information, especially regarding non-communicable diseases and substance use, including alcohol.

Next, a study by Amit (2017) has highlighted these unmet needs, suggesting that the lack of health education contributes to poor knowledge of the risks associated with excessive alcohol consumption. Furthermore, socio-economic factors also influence knowledge and consumption patterns. Research shows that individuals who are unemployed or working in the private sector tend to have higher rates of alcohol use compared to those employed in the civil service. Economic hardships, combined with a lack of recreational alternatives, often lead individuals to use alcohol as a coping mechanism (Amit, 2017).

Thus, addressing poor knowledge about alcohol consumption requires culturally sensitive health education programs that respect traditional practices while promoting awareness of health risks. Community-based interventions, involving local leaders and healthcare providers, can be effective in disseminating information and encouraging responsible drinking behaviours.

5.2 Attitude on Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak

This study examined attitudes toward alcohol consumption among the Iban community at Lubau Baru Longhouse in Sarawak. It found that 50 respondents (51.0%) exhibited poor attitudes, while 48 respondents (49.0%) demonstrated good attitudes. This near-even split

highlights the complex interplay of cultural, social, and economic factors influencing perceptions of alcohol use in these communities.

In this study, most of the participants had a poor attitude toward alcohol consumption. This might be due to cultural practices. A study by Ajan et. al. (2023) stated that among the Iban and Bidayuh communities, attitude towards alcohol consumption is deeply embedded in cultural practices and social rituals. Traditional beverages like *tuak* (rice wine) and *langkau* (rice spirit) are integral to ceremonies and communal gatherings, such as the Gawai Dayak festival. This cultural acceptance can lead to the normalization of alcohol use, making it challenging to recognise and address potential misuse.

Moreover, poor attitudes among participants may be influenced by peer pressure. peer influence plays a significant role in shaping attitudes toward alcohol. In communities where drinking is a common social activity, individuals may feel pressured to conform to group norms, leading to more permissive attitudes toward alcohol consumption (Ajan et. al., 2023). Also, a study by Poojitha and Addepalli (2022) concluded that both peer pressure and the family environment play significant roles in shaping individuals' inclination and initiation attitude towards alcohol consumption. Although their study was conducted in southern India, the findings align with previous research, indicating similar patterns of social influence. Notably, 74% of participants reported that many individuals consume alcohol due to peer group pressures and the desire to attain adult status.

Furthermore, a study by Ajan et al. (2023) among rural Dayak communities, including the Iban, have demonstrated that both positive attitudes toward alcohol consumption ($\beta = .22$, $p < .001$) and perceived social norms ($\beta = .33$, $p < .001$) are significant predictors of the intention to consume alcohol. These findings suggest that adolescents who are influenced by prevailing community expectations and social acceptance are more likely to develop permissive attitudes toward alcohol use.

Next, a study by Khan and Shahzadi (2022) found that curiosity was the primary factor influencing attitudes toward alcohol consumption, reported by 37% of participants. Approximately 29% indicated that peer pressure contributed to their alcohol use. Most participants demonstrated a permissive attitude toward drinking, viewing it to relax, fit in with friends, and maintain social popularity. Apart from that, 12.5% of participants reported that they consume alcohol when experiencing depression or sadness. The study also revealed that 23.5% of respondents identified the primary reason for drinking as enhancing sociability or having an enjoyable time (Khan & Shahzadi, 2022).

Additionally, poor attitudes toward alcohol consumption among participants are supported by findings from Pramaunururut et al. (2022), who reported that some adolescents experienced family disharmony, including parental separation, while others were primarily cared for by grandparents or relatives. As a result, these adolescents often lacked adequate supervision and exhibited inappropriate behaviours such as alcohol use. Family-related problems, particularly separation, were identified as key contributing factors. Furthermore, curiosity and limited awareness were noted as drivers of experimentation and alcohol use for entertainment, especially during significant celebrations such as New Year's Eve and Gawai festival. The study also found that adolescents who directly observed their friends drinking were more likely to engage in alcohol use themselves. Conversely, social support from friends was identified as a protective factor that could help reduce alcohol consumption. Interestingly, adolescents also expressed the belief that parental alcohol use did not necessarily influence teenagers to drink.

The prevalence of poor attitudes toward alcohol consumption among the Iban community at Lubau Baru longhouse, especially villagers in Sarawak, underscores the need for culturally sensitive interventions. Public health initiatives should consider the cultural significance of alcohol in these communities and aim to promote awareness of the health risks

associated with excessive consumption. Engaging community leaders and incorporating traditional values into educational programs may enhance their effectiveness.

5.3 Level of Practice on Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak

In this study, participants' alcohol consumption practices and behaviours were assessed using the Alcohol Use Disorders Identification Test (AUDIT), a globally recognized screening tool developed by the World Health Organization to identify individuals with hazardous and harmful patterns of alcohol use.

Moreover, the findings revealed that 44.9% (n = 44) of participants fell into the low-risk category, scoring between 0 and 7 on the AUDIT. This suggests that nearly half of the respondents engage in alcohol consumption patterns that are considered within safe limits and are unlikely to result in significant health issues (Horváth et al., 2023).

Conversely, 15.3% (n = 15) of participants exhibited hazardous drinking behaviors, indicated by AUDIT scores ranging from 8 to 15. This level of consumption increases the risk of adverse health consequences and may warrant brief interventions or counseling to prevent escalation.

Furthermore, 30.6% (n = 30) of the respondents engaged in harmful drinking practices, with AUDIT scores between 16 and 19. This pattern of consumption is associated with actual harm to the individual's physical and mental health, necessitating more intensive intervention strategies (Higgins-Biddle & Babor, 2019).

Notably, 9.2% (n = 9) of participants scored 20 or above on the AUDIT, indicating probable alcohol dependence. Individuals in this category are likely experiencing significant impairment due to alcohol use and require comprehensive treatment approaches (Higgins-Biddle & Babor, 2019).

Moreover, most of the residents were at low-risk practice towards alcohol intake. Alcohol consumption practice among the Iban community is closely associated with cultural and social occasions, particularly during traditional celebrations such as Gawai Dayak. However, such consumption is generally limited to these specific events, with minimal or occasional use reported during non-festive periods. This pattern of culturally bound and episodic drinking may contribute to the high proportion of individuals classified within the low-risk category on the Alcohol Use Disorders Identification Test (AUDIT) (Buma, 2022).

However, 30 participants (30.6%) were classified as harmful drinkers on the Alcohol Use Disorder Identification Test (AUDIT) due to a combination of social, cultural, and psychological factors that reinforce risky consumption patterns (Khan & Shahzadi, 2022). Peer pressure and social norms play a central role, as individuals often drink to gain acceptance, maintain social status, or conform to group expectations, a dynamic observed across diverse settings (Room et al., 2019). Additionally, cultural acceptance of alcohol use and limited alternative recreational activities can normalise heavy drinking, particularly in rural or underserved communities (Williams et al., 2015). Drinking motives such as coping with stress, alleviating loneliness, or enhancing social experiences further increase the risk of harmful consumption (Kuntsche et al., 2015). Comorbid factors, including tobacco use, psychological distress, and low socioeconomic status, have also been associated with elevated AUDIT scores, indicating that harmful drinking often emerges within complex, interrelated contexts (Mutumba et al., 2023).

Additionally, Friesen et al. (2021) identified several risk factors associated with harmful alcohol use, including being male, having lower levels of education, smoking, and having family members or friends who consume alcohol. Additional factors included growing up in less supportive or unstable households, being single, divorced, widowed, or unmarried, experiencing mental illness, having a history of arrest or incarceration, and a history of abuse or

trauma in childhood or adulthood. Lower levels of religious involvement were also linked to increased risk. Furthermore, an early age of alcohol initiation and higher volumes or frequency of consumption were consistently associated with alcohol use disorder, drink driving, and other alcohol-related harms, particularly in rural and remote communities (Friesen et al., 2021).

These results underscore the importance of utilising standardised tools like the AUDIT to identify varying levels of alcohol-related risk within populations. Implementing targeted interventions based on AUDIT scores can facilitate early detection and appropriate management of alcohol use disorders, ultimately reducing the burden of alcohol-related harm.

5.4 The Relationship between Knowledge, Attitude, and Practice towards Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak

The analysis indicated no significant correlation between participants' knowledge and attitudes toward alcohol consumption, with a Spearman correlation coefficient test of $r(98) = 0.014$ and a p-value of 0.893. This negligible positive correlation suggests that increased knowledge about alcohol does not necessarily translate into more positive attitudes toward its consumption.

Next, this finding aligns with global research highlighting the complex relationship between knowledge and attitudes in health behaviors. For instance, a study among Portuguese university students found that while health knowledge was positively associated with risk behaviors ($r = 0.146$, $p = 0.01$) and health attitudes ($r = 0.083$, $p = 0.05$), the impact of health knowledge on health attitudes was not empirically supported ($\beta = 0.01$, $p > 0.05$). This suggests that students with negative attitudes are more likely to engage in risky behaviours regardless of their health knowledge (Alves, 2023).

Similarly, a study conducted by Alenazi et al. (2023) among male high school students in Riyadh, Saudi Arabia, revealed that despite high levels of knowledge and negative

perceptions about smoking, drinking alcohol, and drug abuse, there was still a high prevalence of these behaviours. This indicates that knowledge alone may not be sufficient to influence behaviour change.

Furthermore, the analysis revealed no significant correlation between knowledge and practice regarding alcohol consumption among the participants, as indicated by the correlation coefficient $r(98) = 0.076$ with a p-value of 0.460. This indicates a negligible positive relationship, suggesting that higher knowledge about alcohol does not necessarily lead to a more positive or negative attitude toward its use. This negligible positive relationship suggests that increased knowledge about alcohol does not necessarily lead to improved or reduced alcohol consumption behaviours. These findings challenge the widely held assumption that enhanced knowledge directly leads to behaviour modification, underscoring the multifaceted nature of health-related behaviour change (Alenazi et al., 2023).

A study by Simons-Morton et al. (2016) further corroborated these findings in a large international study involving adolescents from 24 countries. They reported that despite good knowledge levels about the health risks of alcohol, there was no significant decrease in alcohol consumption over time. Peer influence, stress coping mechanisms, and access to alcohol were more strongly correlated with actual drinking behaviours.

Next, Davoren et al. (2016), in a systematic review of alcohol use in Irish and UK university students, found that despite mandatory alcohol education campaigns, heavy drinking rates remained high (with more than 60% engaging in hazardous drinking based on AUDIT scores). The authors emphasised that interventions solely focusing on awareness failed to change behaviours and recommended more integrated, behaviorally informed strategies.

In the Malaysian context, Ismail et al. (2014) conducted a cross-sectional study among university students and reported that while 76.5% of respondents correctly identified the harmful effects of alcohol, a substantial number still consumed alcohol occasionally or

regularly. Their findings revealed no statistically significant relationship between knowledge scores and frequency of alcohol use, underscoring the limited influence of knowledge alone.

Moreover, the analysis revealed a weak positive correlation between participants' attitudes, and their alcohol consumption practices, with a Spearman correlation coefficient test of $r(98) = 0.20$ and a p-value of 0.064. Although this suggests a slight association, the relationship is not statistically significant, indicating that more favourable attitudes toward alcohol do not necessarily lead to corresponding changes in consumption behavior. This finding aligns with global research emphasising the complex interplay between attitudes and actual practices. For instance, a study by Khan and Shahzadi (2022) found that even among individuals with positive attitudes toward reducing alcohol intake, actual drinking behaviours often remained unchanged due to factors like social norms, peer pressure, and accessibility of alcohol. Their research highlighted that attitudes alone might not be sufficient predictors of behaviour without considering these external influences.

Furthermore, Albarracín et al. (2005) in their meta-analysis on health behaviours concluded that while attitudes can influence intentions, the translation of these intentions into action is often weak. They emphasized the role of self-efficacy and perceived behavioural control as critical mediators in this process. Without confidence in one's ability to change or control over the behaviour, positive attitudes may not lead to actual behaviour modification.

Therefore, the lack of a significant correlation between knowledge and practice regarding alcohol consumption observed in this study mirrors findings in the broader literature. It underscores that knowledge, while foundational, is not independently sufficient to produce behavioural change. To effectively reduce alcohol consumption, public health efforts must integrate educational content with psychosocial, behavioural, and cultural interventions that address the full complexity of decision-making in health behaviour.

5.5 Implications, Recommendations and Future Research

The findings indicate that residents of Lubau Baru longhouse have moderate knowledge, poor attitudes, but low-risk practices regarding alcohol consumption, which carry important public health implications. Their moderate knowledge suggests they understand some harms of alcohol, such as social issues, but may lack awareness of other risks like cancer or mental health problems. This highlights the need for targeted education in local languages, delivered by trusted figures such as village leaders or health workers. Poor attitudes, including viewing alcohol as acceptable or important for cultural events like the Gawai festival, may reduce the impact of health warnings. However, their low-risk drinking practices suggest that cultural traditions (*adat*), religious teachings discouraging heavy drinking, and economic constraints help limit alcohol use.

Next, these protective factors should be supported by health programs instead of ignored. The gap between attitudes and behaviour also suggests a risk for the future: if alcohol becomes cheaper, more available, or more accepted among young people, drinking could increase quickly. Therefore, prevention efforts should strengthen community rules, involve elders and religious leaders, and offer alternatives for social events. Finally, while survey data show this overall pattern, qualitative research is needed to understand why people hold these attitudes despite drinking little, so that health messages can be respectful and effective. A successful approach will combine improving knowledge, carefully changing attitudes, and supporting existing low-risk behaviors to keep alcohol use safe in Lubau Baru over time.

To address the harmful use of alcohol and excessive drinking among the indigenous communities in Sarawak, Malaysia, a comprehensive and culturally sensitive approach is recommended. Policymakers should consider indigenous beliefs, traditions, and social norms when formulating alcohol-related policies and interventions. Any measures taken must be respectful of cultural practices to avoid resistance and perceptions of infringing on the

community's ancestral heritage.

Moreover, a collaborative, multi-sectoral strategy is essential, involving key stakeholders such as government agencies, public health authorities, non-governmental organisations (NGOs), religious institutions, educational institutions, community leaders, and village-level representatives. Given that the indigenous community is predominantly Christian, yet often prioritises traditional customs in alcohol consumption, interventions must carefully balance both cultural and religious values to ensure community acceptance and participation.

Furthermore, there is an urgent need for stricter monitoring and regulation of traditional homemade alcoholic beverages, particularly rice wine, which is commonly produced and sold without oversight, leading to health risks comparable to commercially available alcohol. Therefore, coordinated efforts from all levels, including national, state, and community, are necessary to develop and implement effective strategies aimed at reducing alcohol-related harm while preserving the cultural identity of the indigenous population.

In addition, future research should expand the study to include multiple longhouses or indigenous communities across different regions of Sarawak to improve the generalizability of the findings. Longitudinal studies are also recommended to assess the long-term effects of intervention strategies and to understand how knowledge, attitudes, and practices change over time. Moreover, future work should examine external influences such as socioeconomic status, mental health, peer relationships, and family environment, which may significantly affect alcohol-related behaviours. Finally, there is a need to validate or culturally adapt standardized tools like the Alcohol Use Disorders Identification Test (AUDIT) to ensure they are suitable and meaningful for indigenous contexts, enhancing the accuracy and relevance of future assessments.

5.6 Limitations of the Study

This study has several limitations that should be acknowledged. Firstly, the findings are limited to the Iban community at Lubau Baru Longhouse, which may not represent the wider Iban population or other indigenous communities in Sarawak, thus limiting the generalizability of the results. Additionally, the use of self-reported questionnaires may have introduced social desirability bias, as participants might under-report their alcohol consumption or provide socially acceptable responses due to the sensitive nature of the topic. The cross-sectional design of the study also restricts the ability to establish causal relationships between knowledge, attitude, and alcohol consumption practices.

Moreover, the absence of qualitative methods, such as interviews or focus group discussions, limited the exploration of deeper cultural and social factors influencing alcohol-related behaviors. The study also did not account for other influencing factors like peer pressure, economic status, family traditions, and mental health, which could significantly affect alcohol consumption patterns. Furthermore, the relatively small sample size reduces the statistical power to detect significant associations. The financial constraint and time constraint are also limitations in this study.

In addition, a key limitation of this study is the potential for language barriers, as some residents, especially the elderly, may have faced difficulties in fully understanding the survey questions or consent forms presented in Bahasa Melayu rather than their local Iban dialect. Also, varying levels of literacy among participants could have affected their ability to accurately interpret and complete the questionnaire, potentially influencing the reliability of self-reported knowledge, attitudes, and practices related to alcohol consumption. Lastly, although the Alcohol Use Disorders Identification Test (AUDIT) is a validated tool, its cultural adaptation for the Iban community was limited, which may have affected the accuracy of responses due to potential misinterpretation of certain questions.

5.7 Conclusions

This study aimed to assess the level of knowledge, attitudes, and practices regarding alcohol consumption among the Iban community at Lubau Baru Longhouse, Sarawak. The findings revealed that most participants demonstrated moderate knowledge about alcohol, while a small proportion exhibited good or poor knowledge levels. Despite this, there was no significant correlation between knowledge and attitude, indicating that increased knowledge did not necessarily influence attitudes toward alcohol consumption. Similarly, while there was a weak positive correlation between attitude and practice, it was not statistically significant, suggesting that favourable attitudes did not always translate into responsible drinking practices.

Moreover, this study also highlighted varying patterns of alcohol consumption, with a significant proportion of participants engaging in harmful and hazardous drinking behaviors, while a smaller group exhibited alcohol dependence. These results suggest that alcohol consumption is deeply rooted in cultural and social practices within the community, and knowledge alone is insufficient to alter behavior.

Furthermore, this study highlights the need for holistic, community-based interventions that respect cultural traditions while addressing the health risks of excessive alcohol use. Effective strategies require collaboration among government agencies, public health sectors, non-governmental organizations, religious groups, and community leaders. The findings also stress the importance of regulating traditional alcoholic beverages and encouraging behavioral change through culturally sensitive approaches. Overall, this study offers important insights into the alcohol-related knowledge, attitudes, and practices of the Iban community at the Lubau Baru longhouse, underscoring the complexity of tackling alcohol misuse in indigenous populations and the need for comprehensive intervention strategies.

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APPENDICES

Appendix I: Cover Letter for Ethical Application

Johansson anak Joseph,
Faculty Medicine and Health Sciences,
Universiti Malaysia Sarawak,
94300 Kota Samarahan,
Sarawak.

The Chairman,
Medical Research Ethics Committee,
Faculty Medicine and Health Sciences,
Universiti Malaysia Sarawak,
94300 Kota Samarahan,
Sarawak. 15th December 2024

Professor/Associate Professor/Dr/Sir/Madam,

REQUEST FOR APPROVAL TO CONDUCT RESEARCH PROJECT

I am a final-year student pursuing a Bachelor of Nursing with Honours at the Faculty of Medicine and Health Sciences, UNIMAS. I enrolled in MDJ 4653 Final Year Project I, in which the course is coordinated by Madam Shalin Lee Wan Fei. Please find my details as follows:

Full name: Johansson anak Joseph

Matrix number: 78092

IC No.: 020714-13-0375

I would like to request for the kind approval from the Faculty of Medicine and Health Sciences Medical Research Ethics Committee to conduct the following study:

Research title: Knowledge, Attitude and Practice towards Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak.

Supervisor's name: Mr. Md. Fadlisham bin Samsuddin

Email address: smfadlisham@unimas.my

Supervisor's HP number: 012-9845452

Please find the required documents as appended for your kind consideration and approval.

Thank you.

Yours sincerely,

(JOHANSSON ANAK JOSEPH)

Appendix II: Research Ethics Approval

Deputy Vice Chancellor's Office
(Research and Innovation)
Medical Research Ethics Committee
Tel: 082 581222/1223
Fax: 082 665115

UNIVERSITI MALAYSIA SARAWAK
94300 Kota Samarahan

MEMORANDUM

Reference : UNIMAS/TNC(PI)/09 – 65/01 Jld.4 (40)

To : Md Fadlisham bin Samsuddin
Faculty of Medicine & Health Sciences

From : Chair
Medical Research Ethics Committee

Date : 10 February 2025

Subject : **Research Ethics Approval:**
Knowledge, Attitude and Practice Towards Alcohol Consumption Among the Iban Community in Lubau Baru Longhouse, Sarawak
Ethics Reference Number: FME/25/24

The above matter is referred.

Medical Research Ethics Committee, Universiti Malaysia Sarawak (UNIMAS) has provided ethical **APPROVAL** for this study on 31 January 2025 by Administrative. The investigators involved in this study are:

1) Md Fadlisham bin Samsuddin (Principal Researcher)
Universiti Malaysia Sarawak

2) Johansson anak Joseph
Universiti Malaysia Sarawak

All records and data are to be kept strictly CONFIDENTIAL and can only be used for the purpose of this study. All precautions are to be taken to maintain data confidentiality. Permission from all relevant heads of departments/units where the study will be carried out must be obtained prior to the study.

Please note that the approval is valid from **February 2025** to **February 2026** only. The reference number for this letter must be stated in all correspondence related to this study to facilitate the process.

Thank you with regards and well wishes.

Yours sincerely,

Professor Dr. Mohammad Zulkarnaen bin Ahmad Narihan
Chairman
Medical Research Ethics Committee

c.c: Deputy Vice Chancellor (Research & Innovation)
Director, UNIMAS Publisher

Appendix III: Participant Information Sheet (English Version)

UNIMAS
UNIVERSITI MALAYSIA SARAWAK

PARTICIPANT INFORMATION SHEET

1.	**Title of the study**	**:**	Knowledge, Attitude and Practice towards Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak.
2.	**Main researcher**	**:**	Johansson anak Joseph
3.	**Supervisor**	**:**	Mr. Md. Fadlisham bin Samsuddin
4.	**Institution**	**:**	Department of Nursing Faculty of Medicine & Health Sciences Universiti Malaysia Sarawak
5.	**Name of sponsor**	**:**	No external funding

PARTICIPANT INFORMATION SHEET AND INFORMED CONSENT FORM

(for adult subjects)

1. **Introduction**

Your participation in this study is voluntary. Before you decide whether to take part, it is important to understand why the research is being done and what it will involve. Please take your time to read through and consider this information carefully before deciding if you are willing to participate. Please take your time to read this information sheet carefully, and feel free to ask any questions. After you are properly satisfied that you understand this study and that you wish to participate, you must sign this informed consent form.

You do not have to participate in this study if you do not like to. You may also decline to answer any questions you do not wish to answer. If you volunteer to participate in this study, you may withdraw at any time. If you withdraw, any data gathered from you before your withdrawal will still be used in the study. Your reluctance to participate or withdraw will not affect any other medical or health benefits to which you are entitled.

2. **What is the purpose of the study?**

The primary aim of this study is to examine the knowledge, attitude and practice towards alcohol consumption among the Iban community at Lubau Baru Longhouse, Betong, Sarawak. This study aims to determine how well the Iban community understands the effects, risks, and consequences of alcohol consumption on health and well-being. Moreover, this study has the potential to enhance the Iban community's comprehension and awareness of the health risks and social implications associated with alcohol consumption. Also, it promotes healthier lifestyle decisions and reduces the negative consequences of alcohol misuse, including health issues, economic strain, and conflict within the community. It will highlight areas where knowledge, attitudes and practice may require improvement, providing insight into potential educational needs. The findings of the study may be used to inform the development of targeted awareness programs, curriculum enhancements, or intervention strategies aimed at promoting responsible attitudes and behaviours related to alcohol consumption.

This research will be conducted for 6 months (25/01/2025 until 30/06/2025). The expected number of participants is 103 individuals. Participants will be gathered using simple random samplings.

3. **Who can participate in this study?**

This study will exclusively engage the Iban community aged 18 years old and older, from adolescents to older adults. The study included members of the Iban community who had resided in the region for a minimum of six months and had no history of mental disability, physical impairment, or chronic diseases. In the meantime, the

exclusion criteria included the longhouse residents who were unwilling to participate in this study and no minors will be included in this study.

4. What are my responsibilities when taking part in this study?

This research will utilize a self-administered questionnaire, which has been prepared in the national language, Bahasa Melayu. The printed hard-copy questionnaires will be administered to you and subsequently collected after 30 minutes. You need to fill out informed consent, indicating their willingness to engage and their comprehension of their rights within the context of this research endeavour. This form contains four (4) sections which will enquire about your sociodemographic characteristics, measuring your knowledge, attitude and practice towards alcohol consumption.

5. What are the potential risks and side effects of being in this study?

Your participation in this study is completely voluntary, and your decision may have minimized risks. The level of risk associated with this study is primarily related to time consumption, otherwise minimal. You have the right to refuse to answer any questions that may make you feel uncomfortable, embarrassed and anxious, and you can opt to withdraw from the study at any point without incurring any penalties. These precautions are intended to ensure safe, respectful, and supportive research experience for all participants.

6. What are the benefits of being in this study?

There may or may not be any direct benefits to you. However, participants may gain a deeper understanding of their knowledge, attitudes, and beliefs regarding alcohol consumption, leading to greater self-awareness. Completing the questionnaire may provide an opportunity to identify areas where their understanding of alcohol-related issues could be enhanced, potentially inspiring personal learning or behaviour changes. Participating may contribute to valuable insights that can help shape future educational programs and interventions to promote awareness and healthier behaviours related to alcohol use. The study's findings may help improve the nursing curriculum or guide university initiatives aimed at addressing alcohol-related challenges, benefiting the wider student body and community. Participation involves no financial cost and requires only a small-time commitment, making it an accessible way to engage in meaningful academic research. While the study may not provide immediate or direct personal benefits, its broader impact on public health and nursing education can be significant, making participation an important contribution to the field.

7. Who is funding the research?

This study does not receive any external funding and is fully sponsored by the main study researcher. You will not be paid for participating in this study. There are also no plans to develop commercial products through this study.

8. Will my medical information be kept private?

Your privacy and autonomy are highly respected throughout this research process. Your information will be utilized for the specified purposes of this study, collected using the hardcopy questionnaire by the researcher. Subsequently, the data will be transformed into a soft copy format for analysis purposes. All collected information will be handled with strict confidentiality. Your identity will remain confidential, and your consent will be sought before disclosing any information in study publications or presentations. In the future, if there is a need for additional storage or use of the collected specimen/data, you retain the right to refuse, respecting your autonomy and privacy. Inspection of study data may be carried out by qualified monitors, auditors, and relevant authorities involved in the study.

9. Who should I call if I have questions?

If you have any questions about the study or if you think you have a study-related injury and you want information about this study, don't hesitate to get in touch with the main study researcher, Johansson anak Joseph at telephone number 017-3992095 or email at johanssonjoseph1472@gmail.com

10. Ethical review of the research

This research has been authorised by the Medical Research Ethical Committee of University Malaysia Sarawak. The Medical Research Ethical Committee of University Malaysia Sarawak. If you have any questions about your rights as a participant in this study, please contact: The Secretary, Medical Research & Ethics Committee, Ministry of Health Malaysia, at telephone number 03-3362 8407/8205/8888.

Appendix IV: Participant's Inform Consent Form (English Version)

INFORMED CONSENT FORM

Title of Study: Knowledge, Attitude and Practice towards Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak.

By signing below, I confirm the following:

- I have been given oral and written information for the above study and have read and understood the information given.
- I have had sufficient time to consider participation in the study and have had the opportunity to ask questions and all my questions have been answered satisfactorily.
- I understand that my participation is voluntary, and I can at any time freely withdraw from the study without giving a reason and this will in no way affect my future treatment. I am not taking part in any other research study currently. I understand the risks and benefits, and I freely give my informed consent to participate under the conditions stated. I understand that I must follow the study doctor's (investigator's) instructions related to my participation in the study.
- I understand that study staff, qualified monitors and auditors, the sponsor or its affiliates, and governmental or regulatory authorities, have direct access to my medical record to make sure that the study is conducted correctly, and the data are recorded correctly. All personal details will be treated as STRICTLY CONFIDENTIAL
- I will receive a copy of this subject information/informed consent form signed and dated to bring home.
- I agree/disagree* with my family doctor to be informed of my participation in this study. *(*delete which is not applicable)*

Subject:

Signature: I/C number:

Name: Date:

Investigator conducting informed consent:

Signature: I/C number:

Name: Date:

Impartial witness:

Signature: I/C number:

Name: Date:

Appendix V: Participant Information Sheet (Bahasa Melayu)

MAKLUMAT KAJIAN PESERTA

1. Tajuk kajian	**:**	Pengetahuan, Sikap dan Amalan terhadap Pengambilan Alkohol dalam Kalangan Komuniti Iban di Rumah Panjang Lubau Baru, Sarawak.
2. Penyelidik utama	**:**	Johansson anak Joseph
3. Penyelia	**:**	**a) Penyelia kursus:** Shalin Lee Wan Fei **b) Penyelia penyelidikan utama:** Mr. Md. Fadlisham bin Samsuddin
4. Institut	**:**	**Jabatan Kejururawatan** **Faculty Perubatan dan Sains Kesihatan** **Universiti Malaysia Sarawak**
5. Nama Penaja	**:**	**Tiada penaja luar**

RISALAH MAKLUMAT PESERTA DAN
BORANG PERSETUJUAN atau KEIZINAN PESERTA
(untuk subjek dewasa)

1. **Tajuk penyelidikan**: Pengetahuan, Sikap dan Amalan terhadap Pengambilan Alkohol dalam Kalangan Komuniti Iban di Rumah Panjang Lubau Baru, Sarawak.

2. **Nama Institusi and nama penyelidik:** Jabatan Kejururawatan, Fakulti Perubatan & Sains Kesihatan, Universiti Malaysia Sarawak / Johansson anak Joseph.

3. **Nama penaja**: Tidak menerima penajaan/dana dari pihak luar.

4. **Pengenalan**:

   Risalah ini menjelaskan hal-hal berkenaan penyelidikan tersebut dengan lebih mendalam dan terperinci. Amat penting anda memahami mengapa penyelidikan ini dilakukan dan apa yang dilakukan dalam penyelidikan ini. Sila ambil masa yang secukupnya untuk membaca dan mempertimbangkan dengan teliti penerangan yang diberi sebelum anda bersetuju untuk menyertai penyelidikan ini. Jika ada sebarang kemusykilan ataupun maklumat lanjut yang anda ingin tahu, anda boleh bertanya dengan mana-mana kakitangan yang terlibat dalam penyelidikan ini. Setelah anda berpuas hati bahawa anda memahami penyelidikan ini, dan anda berminat untuk turut serta, anda dikehendaki untuk menandatangani Borang Persetujuan atau Keizinan Peserta, pada muka surat akhir risalah ini.

   Penyertaan anda dalam penyelidikan ini adalah secara sukarela. Anda tidak perlu menyertai penyelidikan ini jika anda tidak mahu. Anda juga mempunyai hak untuk tidak menjawab mana-mana soalan yang anda tidak mahu jawab. Anda juga boleh menarik diri daripada penyelidikan ini pada bila-bila masa sahaja. Jika anda menarik diri, segala maklumat yang telah diperolehi sebelum anda menarik diri tetap akan digunakan dalam penyelidikan ini. Jika anda tidak mahu menyertai ataupun menarik diri dari penyelidikan ini, tindakan anda tidak akan menjejaskan segala hak dan keistimewaan perubatan kesihatan yang selayaknya anda terima.

   Penyelidikan ini telah mendapat kelulusan Jawatankuasa Etika dan Penyelidikan Perubatan, Kementerian Kesihatan Malaysia.

5. Apakah tujuan penyelidikan ini dilakukan?

   Tujuan penyelidikan ini dilakukan adalah untuk mengkaji pengetahuan, sikap, dan amalan terhadap pengambilan alkohol dalam kalangan komuniti Iban di Rumah Panjang Lubau Baru, Betong, Sarawak. Kajian ini bertujuan untuk menentukan sejauh mana komuniti Iban memahami kesan, risiko, dan akibat pengambilan alkohol terhadap kesihatan dan kesejahteraan.. Penyelidikan ini diperlukan kerana dapat memberikan pemahaman yang lebih lanjut berkenaan dengan masalah-masalah yang dihadapi oleh ibu-bapa. Selain itu, kajian ini berpotensi untuk meningkatkan pemahaman dan kesedaran komuniti Iban mengenai risiko kesihatan dan implikasi sosial yang berkaitan

dengan pengambilan alkohol. Kajian ini juga mempromosikan keputusan gaya hidup yang lebih sihat dan mengurangkan kesan negatif penyalahgunaan alkohol, termasuk masalah kesihatan, tekanan ekonomi, dan konflik dalam komuniti.

Kajian ini akan menyoroti aspek pengetahuan, sikap, dan amalan yang mungkin memerlukan penambahbaikan, sekali gus memberikan pandangan mengenai keperluan pendidikan yang berpotensi. Hasil kajian ini boleh digunakan untuk memaklumkan pembangunan program kesedaran yang disasarkan, penambahbaikan kurikulum, atau strategi intervensi yang bertujuan untuk memupuk sikap dan tingkah laku yang bertanggungjawab berkaitan pengambilan alkohol.

Penyelidikan ini akan berlangsung selama 6 bulan, bermula dari 25/01/2025 sehingga 30/062025. Dijangka bahawa 103 individu akan mengambil bahagian dalam kajian ini.

6. Siapa yang boleh menyertai kajian ini?

Kajian ini akan melibatkan secara eksklusif komuniti Iban berumur 18 tahun dan ke atas, daripada golongan remaja hingga dewasa tua. Kajian ini melibatkan komuniti Iban yang telah menetap di kawasan tersebut sekurang-kurangnya enam bulan dan tidak mempunyai sejarah kecacatan mental, kecacatan fizikal, atau penyakit kronik. Sementara itu, kriteria pengecualian termasuk penghuni rumah panjang yang tidak bersedia untuk menyertai kajian ini dan tiada individu bawah umur akan disertakan dalam kajian ini..

7. Apakah tanggungjawab saya sewaktu menyertai penyelidikan ini?

Penyelidikan ini akan menggunakan borang soal selidik yang diisi sendiri, yang telah disediakan dalam bahasa kebangsaan, iaitu Bahasa Melayu. Borang soal selidik bercetak akan diberikan kepada peserta dan dikumpulkan semula selepas 30 minit. Peserta perlu mengisi borang persetujuan dimaklumkan, yang menunjukkan kesediaan mereka untuk mengambil bahagian serta pemahaman mereka mengenai hak-hak mereka dalam konteks penyelidikan ini. Borang ini mengandungi empat (4) bahagian yang akan menanyakan tentang ciri-ciri sosiodemografi anda serta mengukur pengetahuan, sikap, dan amalan anda terhadap pengambilan alkohol.

8. Apakah manfaatnya saya menyertai kajian ini?

Penyelidikan ini mungkin akan mendatangkan manfaat ataupun langsung tiada memberi apa-apa manfaat kepada anda. Segala maklumat yang diperolehi daripada penyelidikan ini akan dapat membantu dalam meemahami dan meningkatkan pengetahuan, sikap, dan kepercayaan anda berkaitan pengambilan alkohol. Menyelesaikan soal selidik ini boleh memberikan peluang untuk mengenal pasti bidang di mana pemahaman anda tentang isu-isu berkaitan alkohol boleh dipertingkatkan, yang berpotensi memberi inspirasi kepada pembelajaran atau perubahan tingkah laku peribadi. Penyertaan ini juga mungkin menyumbang kepada pandangan berharga yang boleh membantu membentuk program pendidikan dan intervensi pada masa hadapan untuk mempromosikan kesedaran serta tingkah laku yang lebih sihat berkaitan penggunaan alkohol.

Hasil kajian ini boleh membantu memperbaiki kurikulum kejururawatan atau membimbing inisiatif universiti yang bertujuan menangani cabaran berkaitan alkohol dan memberi manfaat kepada para pelajar dan masyarakat. Penyertaan anda tidak melibatkan sebarang kos kewangan dan hanya memerlukan komitmen masa yang kecil. Walaupun kajian ini mungkin tidak memberikan manfaat langsung atau segera kepada anda, penyelidikan ini akan memberi kesan yang lebih luas dan signifikan terhadap kesihatan awam dan pendidikan kejururawatan, menjadikan penyertaan anda satu sumbangan penting kepada bidang ini.

9. Apakah risiko dan kesan-kesan sampingan menyertai penyelidikan ini?

Risiko untuk penyertaan penyelidikan ini yang adalah minima dan tidak akan menjejaskan rawatan anda. Anda berhak untuk tidak menjawab jika rasa tidak selesa dengan mana-mana soalan kajian. Anda mempunyai hak untuk menolak menjawab mana-mana soalan yang mungkin membuat anda berasa tidak selesa, malu, atau cemas, dan anda boleh memilih untuk menarik diri daripada kajian ini pada bila-bila masa tanpa dikenakan sebarang penalti. Langkah berjaga-jaga ini bertujuan untuk memastikan pengalaman anda adalah selamat, dihormati, dan menyokong hak anda sebagai peserta.

10. Siapakah yang membiayai penyelidikan ini?

Kajian ini tidak menerima penajaan/dana dari pihak luar. Anda tidak akan dibayar untuk menyertai kajian ini.

11. Adakah maklumat saya akan dirahsiakan ?

Segala maklumat anda yang diperolehi dalam penyelidikan ini akan disimpan dan dikendalikan secara sulit, bersesuaian dengan peraturan-peraturan dan/ atau undang-undang yang berkenaan. Semua maklumat yang dikumpulkan akan dikendalikan dengan ketat dan dirahsiakan. Pada masa hadapan, jika terdapat keperluan untuk penyimpanan tambahan atau penggunaan spesimen/data yang dikumpulkan, anda mempunyai hak untuk menolak, selaras dengan penghormatan terhadap autonomi dan privasi anda. Sekiranya hasil penyelidikan ini diterbitkan atau dibentangkan kepada orang ramai, identiti anda tidak akan didedahkan tanpa kebenaran anda terlebih dahulu.

Pihak-pihak tertentu seperti individu yang terlibat dalam penyelidikan ini, juruaudit dan jurupantau yang terlatih, pihak berkuasa kerajaan atau undang-undang, boleh memeriksa maklumat atau data kajian jika diperlukan.

12. Siapakah yang perlu saya hubungi sekiranya saya mempunyai sebarang pertanyaan?

Jika anda mempunyai sebarang pertanyaan mengenai kajian ini dan ingin mendapatkan maklumat lanjut mengenai kajian ini, jangan ragu untuk menghubungi penyelidik utama kajian, Johansson anak Joseph di nombor telefon 017-3992095 atau emel di johanssonjoseph1472@gmail.com.

Jika anda mempunyai sebarang pertanyaan berkaitan dengan hak-hak anda sebagai peserta dalam penyelidikan ini, sila hubungi: Setiausaha, Jawatankuasa Etika & Penyelidikan Perubatan, Kementerian Kesihatan Malaysia, melalui talian telefon 03-3362 8407/8205/8888.

Appendix VI: Participant's Inform Consent Form (Bahasa Melayu)

BORANG PERSETUJUAN/ KEIZINAN PESERTA

Tajuk Penyelidikan : Pengetahuan, Sikap dan Amalan terhadap Pengambilan Alkohol dalam Kalangan Komuniti Iban di Rumah Panjang Lubau Baru, Sarawak.

Dengan menandatangani di bawah, saya mengesahkan bahawa:

- Saya telah diberi maklumat tentang penyelidikan di atas secara lisan dan bertulis dan saya telah membaca dan memahami segala maklumat yang diberikan dalam risalah ini.
- Saya telah diberikan masa yang secukupnya untuk mempertimbangkan penyertaan saya dalam penyelidikan ini dan telah diberi peluang untuk bertanyakan soalan dan semua persoalan saya telah dijawab dengan sempurna dan memuaskan.
- Saya juga faham bahawa penyertaan saya adalah secara sukarela dan pada bila-bila masa saya bebas menarik diri daripada penyelidikan ini tanpa harus memberi sebarang alasan dan ianya sama sekali tidak akan menjejaskan rawatan perubatan saya pada masa akan datang. Saya tidak mengambil bahagian dalam mana-mana penyelidikan lain pada masa ini. Saya juga memahami tentang risiko dan manfaat penyelidikan ini dan saya secara sukarela memberi persetujuan untuk menyertai penyelidikan ini di bawah syarat-syarat yang telah dinyatakan di atas. Saya faham saya harus mematuhi nasihat dan arahan yang berkaitan dengan penyertaan saya dalam penyelidikan ini daripada doktor penyelidikan (penyelidik).
- Saya faham bahawa kakitangan penyelidikan, pemantau dan juruaudit terlatih , pihak penaja atau gabungannya, dan pihak berkuasa kerajaan atau undang-undang, mempunyai akses langsung dan boleh menyemak laporan perubatan saya bagi memastikan penyelidikan ini dijalankan dengan betul dan data direkodkan dengan betul. Segala maklumat dan data peribadi akan dianggap sebagai SULIT.
- Saya akan menerima satu salinan 'Risalah Maklumat Pesakit dan Borang Persetujuan atau Keizinan Pesakit' yang telah lengkap dengan tarikh dan tandatangan untuk dibawa pulang ke rumah.
- Saya bersetuju/ tidak bersetuju* untuk doktor yang merawat keluarga saya diberitahu tentang penyertaan saya dalam penyelidikan ini. *(*Potong mana yang tidak berkenaan)*

Subjek:

Tandatangan: Nombor K/P:

Nama: Tarikh:

Penyelidik yang mengendalikan proses menandatangani borang keizinan:

Tandatangan:	Nombor K/P:
Nama:	Tarikh:

Saksi tidak-berpihak/adil:

Tandatangan:	Nombor K/P:
Nama:	Tarikh:

Appendix VII: Data Collection Instrument (English Version)

Please tick (✓) the boxes provided for the answer you feel is the correct response and write your answer in the space provided.

Section A

Sociodemographic Information

1. Age group:
   a. 18-29 ☐
   b. 30-39 ☐
   c. 40-49 ☐
   d. 50-59 ☐
   e. 60 and older ☐

2. Gender:
   a. Male ☐
   b. Female ☐

3. Marital Status:
   a. Single ☐
   b. Married ☐
   c. Divorced ☐
   d. Widow/Widower ☐

4. Highest Level of Education:
   a. No formal education ☐
   b. Primary school ☐
   c. Secondary school ☐
   d. Other (please specify): _____

5. Occupation:
    a. Student ☐
    b. Unemployed ☐
    c. Employed ☐
    d. Self-employed/Business ☐
    e. Agriculturist ☐

Section B

Questionnaire to assess general information about alcohol.

The questions are either true or false.

If you think the answer is TRUE, write "T" in the box

If you think the answer is FALSE, write "F" in the box

No.	**Items**	**True/False**
1.	Alcohol is usually classified as a stimulant.	
2.	Alcohol is not a drug.	
3.	Approximately 10% of fatal highway accidents are alcohol related.	
4.	Many people drink to overcome problems, loneliness and depression.	
5.	A person cannot become an alcoholic by just drinking beer.	
6.	Moderate consumption of alcoholic beverages is generally not harmful to the body.	
7.	Many people drink for social acceptance, because of peer group pressures, and to gain adult status.	
8.	There is usually more alcoholism in a society that accepts drunken behaviour than in a society that frowns on drunkenness.	
9.	Eating while drinking will not slow down the absorption of alcohol in the body.	
10.	It is estimated that approximately 85% of the adults who drink misuse or abuse alcoholic beverages.	
11.	Drinking milk before drinking an alcoholic beverage will slow the absorption of alcohol into the body.	
12.	Beer usually contains from 2–12% alcohol by volume.	
13.	Drinking coffee or taking a cold shower can be an effective way of sobering up.	
14.	Liquor taken straight will affect you faster than liquor mixed with water.	
15.	Alcohol has only been used in a very few societies throughout history.	

Section-C

Attitude towards Alcohol Consumption

Please tick [✓] against your most appropriate response in the column provided.

No.	Items	Agree	Undecided	Disagree
1.	Alcohol addiction destroys the life of the user.			
2.	It is better to keep away from an alcoholic.			
3.	There is nothing wrong in accepting your brother or sister, if he/she is alcoholic.			
4.	Alcoholism is a must for today's lifestyle.			
5.	Alcoholism is an immoral act			
6.	Alcohol can make a person a more creative thinker.			
7.	Alcoholics are problematic to their families and to the society.			
8.	It is possible to come out of alcoholism.			
9.	Alcohol is necessary to celebrate any event.			
10.	Alcoholism will affect financial status of the family.			
11.	Alcoholism is one of the main reasons for crime in the society.			
12.	Alcohol helps to get rid off the difficulties of life.			
13.	Alcohol use helps to attain adult status soon.			
14.	Alcoholism results in many diseases.			
15.	Drinking and driving is an adventurous act.			

Section D

Practice towards Alcohol Consumption

Please tick [✓] against your most appropriate response in the space.

***ALCOHOL USE DISORDER IDENTIFICATION TEST* (AUDIT-10)**			
1.	How often do you have a drink containing alcohol?	**6.**	During the past year, how often have you needed a drink in the morning to get yourself going after a heavy drinking session?
(0)	Never	**(0)**	Never
(1)	Monthly or less	**(1)**	Less than montly
(2)	2 – 4 times a month	**(2)**	Monthly
(3)	2 – 3 times a week	**(3)**	Weekly
(4)	4 or more times a week	**(4)**	Daily or almost daily
2.	How many standard drinks containing alcohol do you have on a typical day when drinking?	**7.**	During the past year, how often have you had a feeling of guilt or remorse after drinking?
(0)	1 or 2	**(0)**	Never
(1)	3 or 4	**(1)**	Less than monthly
(2)	5 or 6	**(2)**	Monthly
(3)	7, 8, and 9	**(3)**	Weekly
(4)	10 and more	**(4)**	Daily or almost daily
3.	How often do you have six or more drinks on one occasion?	**8.**	During the past year, have you been unable to remember what happened the night before because you had been drinking?
(0)	Never	**(0)**	Never
(1)	Less than monthly	**(1)**	Less than monthly
(2)	Monthly	**(2)**	Monthly
(3)	Weekly	**(3)**	Weekly

	(4)	Daily or almost daily		**(4)**	Daily or almost daily
4.	During the past year, how often have you found that you were not able to stop drinking once you had started?		**9.**	Have you or someone else been injured as a result of your drinking?	
	(0)	Never		**(0)**	Never
	(1)	Less than monthly		**(2)**	Yes, but not in the last year
	(2)	Monthly		**(4)**	Yes, during the last year
	(3)	Weekly			
	(4)	Daily or almost daily			
5.	During the past year, how often have you failed to do what was normally expected of you because of drinking?		**10.**	Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested you cut down?	
	(0)	Never		**(0)**	Never
	(1)	Less than monthly		**(2)**	Yes, but not in the last year
	(2)	Monthly		**(4)**	Yes, during the last year
	(3)	Weekly			
	(4)	Daily or almost daily			
		Total score			

Appendix VIII: Data Collection Instrument (Bahasa Melayu)

Sila tandakan (✓) pada kotak yang disediakan untuk jawapan anda dan sila tuliskan jawapan anda di ruang yang disediakan.

Bahagian A

Maklumat Sosiodemografi

1. Kumpulan Umur:
   a. 18-29 ☐
   b. 30-39 ☐
   c. 40-49 ☐
   d. 50-59 ☐
   e. 60 tahun ke atas ☐

2. Jantina:
   a. Lelaki ☐
   b. Perempuan ☐

3. Status Perkahwinan:
   a. Bujang ☐
   b. Berkahwin ☐
   c. Bercerai ☐
   d. Balu/Janda/Duda ☐

4. Tahap Pendidikan Tertinggi:
   a. Tidak bersekolah ☐
   b. Sekolah rendah ☐
   c. Sekolah menengah ☐

   d. Lain-lain (sila nyatakan): _____

5. Pekerjaan:
   a. Pelajar ☐
   b. Tidak Bekerja ☐
   c. Bekerja ☐
   d. Bekerja Sendiri / Perniagaan ☐
   e. Petani ☐

Bahagian B

Borang Soal Selidik untuk Menilai Pengetahuan Umum mengenai Alkohol

Soalan-soalan ini mempunyai jawapan benar atau salah.

Jika anda rasa jawapannya **BENAR**, tulis "**B**" di dalam kotak.

Jika anda rasa jawapannya **SALAH**, tulis "**S**" di dalam kotak.

No.	**Perkara**	**Benar/Salah**
1.	Alkohol biasanya dikategorikan sebagai perangsang.	
2.	Alkohol bukanlah sejenis dadah.	
3.	Kira-kira 10% daripada kemalangan maut di jalan raya disebabkan alkohol.	
4.	Ramai orang meminum alkohol untuk mengatasi masalah, kesepian, dan kemurungan.	
5.	Seorang individu tidak boleh menjadi seorang peminum alkohol tegar hanya dengan meminum bir.	
6.	Pengambilan minuman beralkohol secara sederhana umumnya tidak membahayakan badan.	
7.	Ramai meminum alkohol untuk diterima dalam masyarakat, disebabkan oleh tekanan ajakan rakan sebaya, dan ingin digelar status dewasa.	
8.	Masyarakat biasanya menerima tingkah laku mabuk berbanding masyarakat yang tidak menyukai tingkah laku mabuk.	
9.	Makan sambil meminum alkohol tidak akan memperlahankan penyerapan alkohol dalam badan.	
10.	Dianggarkan bahawa kira-kira 85% daripada orang dewasa menyalahgunakan minuman beralkohol.	
11.	Meminum susu sebelum minum minuman beralkohol akan melambatkan penyerapan alkohol ke dalam badan.	
12.	Bir biasanya mengandungi antara 2–12% alkohol mengikut isipadu.	
13.	Meminum kopi atau mandi air sejuk boleh menjadi cara yang berkesan untuk mengembalikan kesedaran akibat mabuk.	

14.	Minuman keras (arak) yang diminum terus akan memberi kesan mabuk lebih cepat berbanding minuman keras yang dicampur dengan air minuman lain seperti air soya atau teh bunga.	
15.	Alkohol hanya digunakan dalam beberapa masyarakat sahaja sepanjang sejarah.	

Bahagian C

Sikap terhadap Pengambilan Minuman Alkohol

Sila tandakan [✓] bagi jawapan yang paling sesuai bagi anda di ruang kotak disediakan.

No.	Perkara	Setuju	Tidak pasti	Tidak setuju
1.	Ketagihan alkohol merosakkan kehidupan pengguna.			
2.	Adalah lebih baik untuk menjauhi seseorang yang tagih meminum alkohol.			
3.	Tidak ada yang salah dalam menerima adik-beradik lelaki atau perempuan anda, jika dia ketagihan alkohol			
4.	Ketagihan alkohol ialah satu keperluan untuk gaya hidup hari ini.			
5.	Ketagihan alkohol adalah perbuatan yang tidak bermoral.			
6.	Alkohol boleh membuatkan seseorang berfikiran lebih kreatif.			
7.	Peminum alkohol adalah bermasalah kepada keluarga.			
8.	Tidak mustahil untuk berhenti daripada ketagih alkohol.			
9.	Alkohol harus ada untuk meraikan sebarang majlis atau acara.			
10.	Ketagihan alkohol akan menjejaskan status kewangan keluarga.			
11.	Ketagihan alkohol adalah salah satu sebab utama jenayah berlaku dalam masyarakat.			
12.	Alkohol membantu menyelesaikan masalah dalam hidup.			
13.	Meminum alkohol membantu untuk mencapai status dewasa dengan cepat.			

14.	Ketagihan alkohol merupakan punca kepada banyak penyakit.			
15.	Memandu setelah meminum alkohol dan mabuk adalah perbuatan berisiko.			

Bahagian D

Amalan terhadap Pengambilan Minuman Alkohol

Sila tandakan [✓] bagi jawapan anda di ruang kotak disediakan.

ALCOHOL USE DISORDER IDENTIFICATION TEST **(AUDIT-10)**	
1. Dalam tempoh 12 bulan yang lepas berapa kerapkah anda minum minuman keras/arak/beralkohol?	**6.** Dalam tempoh 12 bulan yang lepas, selepas meminum minuman keras/arak/beralkohol dalam jumlah banyak, berapa kerapkah pada pagi esoknya anda perlu meminum minuman keras/arak/beralkohol sebelum memulakan hari anda?
(0) Tak pernah [Terus ke soalan 9 & 10]	**(0)** Tak pernah
(1) Sekali sebulan atau kurang	**(1)** Kurang dari sekali sebulan
(2) 2 – 4 kali sebulan	**(2)** Sekali sebulan
(3) 2 – 3 kali seminggu	**(3)** Sekali seminggu
(4) 4 kali atau lebih seminggu	**(4)** Setiap hari atau hampir setiap hari
2. Kebiasaannya pada hari yang anda minum, berapa banyakkah anda minum minuman keras/arak/beralkohol?	**7.** Dalam tempoh 12 bulan yang lepas, berapa kerapkah anda rasa bersalah atau menyesal selepas minum minuman keras/arak/ beralkohol?
(0) 1 atau 2	**(0)** Tak pernah
(1) 3 atau 4	**(1)** Kurang dari sekali sebulan
(2) 5 atau 6	**(2)** Sekali sebulan
(3) 7, 8, dan 10	**(3)** Sekali seminggu
(4) 10 dan lebih	**(4)** Setiap hari atau hampir setiap hari
3. Berapa kerap anda minum enam minuman alcohol atau lebih minuman beralkohol pada satu masa?	**8.** Dalam tempoh 12 bulan yang lepas, berapa kerapkah anda tidak dapat mengingati apakah yang telah berlaku malam sebelumnya disebabkan anda telah mengambil minuman keras/arak/beralkohol?
(0) Tak pernah	**(0)** Tak pernah
(1) Kurang dari sekali sebulan	**(1)** Kurang dari sekali sebulan
(2) Sekali sebulan	**(2)** Sekali sebulan
(3) Sekali seminggu	**(3)** Sekali seminggu
(4) Setiap hari atau hampir setiap hari	**(4)** Setiap hari atau hampir setiap hari
4. Dalam tempoh 12 bulan yang lepas, berapa kerapkah anda tidak boleh berhenti minum	**9.** Pernahkah anda atau orang lain tercedera disebabkan anda meminum minuman keras/arak/beralkohol?

	apabila anda mula minum minuman keras/arak/beralkohol?			
	(0) Tak pernah		**(0)** Tidak	
	(1) Kurang dari sekali sebulan		**(2)** Ya,tetapi bukan dalam tempoh setahun yang lepas	
	(2) Sekali sebulan		**(4)** Ya, dalam tempoh setahun yang lalu	
	(3) Sekali seminggu			
	(4) Setiap hari atau hampir setiap hari			
5.	Dalam tempoh 12 bulan yang lepas, akibat dari minum minuman keras/arak/ beralkohol, berapa kerapkah anda tidak boleh melakukan apa yang biasanya anda lakukan?		**10.** Pernahkah saudara anda atau kawan atau doctor atau anggota kesihatan mengambil berat atau mencadangkan supaya anda mengurangkan pengambilan minuman keras/arak/ beralkohol?	
	(0) Tak pernah		**(0)** Tidak	
	(1) Kurang dari sekali sebulan		**(2)** Ya, tetapi bukan dalam tempoh setahun yang lepas	
	(2) Sekali sebulan		**(4)** Ya, dalam tempoh setahun yang lalu	
	(3) Sekali seminggu			
	(4) Setiap hari atau hampir setiap hari			
	Jumlah skor			

Appendix IX: Letter Seeking Permission to Use Questionnaire

Request for Questionnaire Tools and Contact Information for Research Purposes

JJ

Johansson anak Joseph

To: vc@rguhs.ac.in

Sat 1/18/2025 3:30 PM

Dear Prof./Dr./Mr./Mrs.,

My name is Johansson anak Joseph, a year 4, final-year undergraduate student at the University of Malaysia, Sarawak (UNIMAS), a nursing student pursuing a Bachelor of Nursing program and currently in the process of writing a proposal for my Final Year Project (FYP) and working on a research study titled "Knowledge, Attitude, and Practice towards Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak."

I came across Prof. Ravindra Kumar KV's research work, titled "A Study to Assess the Knowledge and Attitude towards the Effect of Alcohol among the Students in a Selected Pre-University College in Bangalore, with a View to Develop an Information Guide Sheet on Prevention of Alcoholism" and found his questionnaire particularly relevant to my research objectives. The article gave me insight on how to guide me in creating the questionnaire. I am writing to request his consent and permission to use the questionnaire in my study.

May I kindly request Prof. Ravindra Kumar KV's email address to communicate directly regarding this matter?

Thank you very much for considering my request. I look forward to your positive response.

Sincerely,

Johansson anak Joseph
Final Year Nursing student,
Faculty of Medicine and Health Sciences,
University of Malaysia, Sarawak.

Appendix X: Gantt Chart

Activity	Year/Months									
	2024				2025					
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July
Determination of research title										
Literature review										
Meeting with supervisor										
Submit oral defence slides										
Ethical approval										
Submission of first draft										
FYP 1: submission of research proposal										
Data collection										
Data analysis										
Writing up report										
Submit final draft										
FYP 2: Submission of final project										

Appendix XI: Expenditure

Project Title:		**Knowledge, Attitude and Practice towards Alcohol Consumption among the Iban Community at Lubau Baru Longhouse, Sarawak.**	
Project Duration:		**October 2024 – July 2025**	
No.	**Items**	**Quantity**	**Budget (RM)**
1.	Notebook and pen	1 notebook and 1 pen	RM5
2.	Ink printer 790BK (Canon G2010)	1	RM40
3.	A4 paper 80GSM	A ream of paper	RM15
4.	Printing and binding the FYP report	1	RM30
5.	Internet data plan (Hotlink)	2 months	RM80
6.	SPSS Software	1	RM5
7.	Transportation fuel	1	RM30
8.	FYP Poster	1	RM40
Total (RM)			RM245

Appendix XII: Turnitin Similarity Index Report

Johansson (FYP 2 Turnitin)

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