

**EFFECTIVENESS OF HEALTH EDUCATION AND  
BRIEF INTERVENTION IN REDUCING RISK OF  
ALCOHOL DRINKING AMONG ETHNIC GROUPS  
IN KOTA KINABALU**



**WENDA RIONA LAMIRI**

**UMS**  
UNIVERSITI MALAYSIA SABAH

**FACULTY OF MEDICINE AND HEALTH SCIENCE  
UNIVERSITI MALAYSIA SABAH  
2023**

**EFFECTIVENESS OF HEALTH EDUCATION AND  
BRIEF INTERVENTION IN REDUCING RISK OF  
ALCOHOL DRINKING AMONG ETHNIC GROUPS  
IN KOTA KINABALU**

**WENDA RIONA LAMIRI**



**UMS**

**THESIS SUBMITTED IN FULFILMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF  
MASTER OF SCIENCE**

**FACULTY OF MEDICINE AND HEALTH SCIENCE  
UNIVERSITI MALAYSIA SABAH  
2023**

## ABSTRACT

**Introduction:** Sabah ranked second highest in alcohol consumption in Malaysia with 18.8%, after Sarawak 31.1% and Kuala Lumpur at third place with 18.4% while prevalence of current drinker in Malaysia was 11.1% as reported by NHMS 2019. The general objective of this research is to investigate the effectiveness of health education and brief intervention in reducing risk of alcohol drinking in Kota Kinabalu (KK) while the specific objective is to determine the proportions of different types of alcohol drinkers in KK, and to determine the effectiveness of intervention in reducing risk of alcohol drinking after three months between intervention and control groups.

**Methods:** A quasi-experimental study was done in KK where data were collected from seven areas, selected using convenient sampling. There were two groups of participants – intervention and control group. Screening was done using self-report or assisted questionnaire, Alcohol Use Disorder Identification Test (AUDIT), which was validated in Malay version by Universiti Malaya. AUDIT score was calculated and participants were categorized into zones according to score obtained. Health education and brief intervention (in reference to published guideline by MOH) was given according to zones, scoring then repeated after three months. Comparison between two groups were then made after three months to see the effectiveness of mentioned intervention. **Result:** The age range of the participants in this study was from 13 to 85 years old with 406 males and 360 females with a total of 766 participants – 473 are in the intervention group while 293 are in the control group. Among them, 9.9% are adolescent, 45.8% young adulthood, 37.3% middle adulthood and 6.9% in late adulthood. The types of drinkers observed based on their consumption was 55.3% low risk, 33.6% medium risk, 6.4% high risk and 4.4% dependent drinkers. Chi square test was initially done to see whether both groups were comparable or not which has shown both groups to be similar in age and genders but different in ethnic groups. The mean of AUDIT score change was greater in intervention group ( $M=-1.34$ ,  $SD=3.0$ ) compared to control group ( $M=-0.22$ ,  $SD=3.46$ ) and it is statistically significant with  $p<0.05$  (CI 95%). The difference in demography as mentioned above is adjusted by using linear regression which has shown that intervention is still effective even after adjusted to demography with  $p$ -value  $<0.05$ . **Conclusion:** Health education and brief intervention is effective in reducing risk of alcohol drinking in KK. This study conducted in KK suggests that screening coupled with brief intervention is effective in reducing risky drinking and thus should be practices not only in healthcare facilities but also in community level.

**Keywords:** Alcohol, Alcohol Use Disorder Identification Test (AUDIT), Health Education, Kota Kinabalu, Primary Healthcare

## **ABSTRAK**

### **KEBERKESANAN SARINGAN BERSERTA PENDIDIKAN KESIHATAN DAN INTERVENSI RINGKAS DALAM MENGURANGKAN PENGAMBILAN ALKOHOL BERISIKO DALAM KALANGAN KUMPULAN ETNIK DI KOTA KINABALU**

**Pengenalan:** Sabah menduduki tempat kedua (18.8%) dalam pengambilan alcohol tertinggi di Malaysia selepas Sarawak (18.8%) dan Kuala Lumpur (18.4%) manakala prevalen peminum semasa di Malaysia adalah 11.1% menurut NHMS (2019). Objektif umum kajian ini adalah untuk menilai keberkesanan pendidikan kesihatan dan intervensi ringkas dalam mengurangkan pengambilan alcohol berisiko di KK manakala objektif utama bertujuan untuk mengidentifikasi peratus jenis peminum di KK serta mengenalpasti keberkesanan intervensi selepas tiga bulan dalam kumpulan intervensi dan kawalan. **Kaedah:** Kajian kuasi eksperimen telah dilakukan di KK di mana data dikumpul dari tujuh kawasan, dipilih menggunakan persampelan mudah. Terdapat dua kumpulan peserta - kumpulan intervensi dan kawalan. Saringan dibuat menggunakan borang soal selidik. Alcohol Use Dependence Identification Test (AUDIT), yang telah disahkan dalam versi Bahasa Melayu oleh Universiti Malaya. Markah AUDIT dikira dan peserta dikategorikan kepada zon mengikut markah yang diperolehi. Pendidikan kesihatan dan intervensi ringkas (berpandukan garis panduan KKM) diberikan mengikut zon, pemarkahan kemudian diulang selepas tiga bulan. Perbandingan antara dua kumpulan kemudiannya dibuat selepas tiga bulan untuk melihat keberkesanan intervensi yang dilakukan. **Keputusan:** Julat umur peserta dalam kajian ini adalah dari 13 hingga 85 tahun dengan 406 lelaki dan 360 perempuan berjumlah keseluruhan 766 peserta – 473 adalah dalam kumpulan intervensi manakala 293 kawalan. Antaranya, 9.9% adalah remaja, 45.8% belia, 37.3% dewasa dan 6.9% warga emas. Jenis peminum yang diperhatikan berdasarkan pengambilan alcohol ialah 55.3% risiko rendah, 33.6% risiko medium, 6.4% berbahaya dan 4.4% kebergantungan. Ujian chi square pada mulanya dilakukan untuk melihat sama ada kedua-dua kumpulan boleh dibandingkan atau tidak yang telah menunjukkan kedua-dua kumpulan adalah sama dari segi umur dan jantina tetapi berbeza pada aspek kumpulan etnik. Purata perubahan skor AUDIT adalah lebih besar dalam kumpulan intervensi ( $M=-1.34$ ,  $SD=3.0$ ) berbanding kumpulan kawalan ( $M=-0.22$ ,  $SD=3.46$ ) dan ia adalah signifikan secara statistik dengan nilai  $p<0.05$  (CI 95%). Perbezaan demografi seperti yang dinyatakan diselaraskan dengan menggunakan regresi linear yang telah menunjukkan bahawa intervensi berkesan walaupun selepas diselaraskan kepada demografi dengan nilai  $p < 0.05$ . **Kesimpulan:** Pendidikan kesihatan dan intervensi ringkas berkesan dalam mengurangkan risiko pengambilan alcohol di KK. Kajian yang dijalankan di KK ini mencadangkan bahawa saringan dan intervensi ringkas adalah berkesan dalam mengurangkan risiko pengambilan alcohol dan dengan itu harus menjadi amalan bukan sahaja di pusat kesihatan tetapi juga di peringkat komuniti.

**Kata Kunci:** Alcohol, Ujian Saringan AUDIT-M, Kota Kinabalu, Pendidikan Kesihatan, Kesihatan Primer