



## CONSEQUENCES OF ILLICIT BREWS ON HEALTH AND FAMILY FOOD SECURITY IN BUNGOMA COUNTY, KENYA'S BUMULA AND KANDUYI SUB-COUNTIES.

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### ABSTRACT

Illicit brew accounts for 60% of alcohol drunk in Kenya, with detrimental effects on health and food security. This study aimed to determine health consequences of illicit local brews on household food security was conducted in Bumula and Kanduyi Sub-Counties, Kenya. Correlational survey research design was used. The 726 respondents were sampled by stratified random sampling where household heads and key informants were purposefully sampled. Interviews, structured questionnaires, and observation were used to collect data after validation by the experts in the subject area. The collected data was analyzed both descriptively and inferentially using Statistical Package for Social Scientists (SPSS) version 26 and expressed as frequencies and percentages in tables. Multiple regression was used to determine the extent to which health effects of illicit brews affected household food security. Chi-square statistic was used to test whether health consequences had significant effect on household food security. From the findings health effects of illicit brews were significant on household food security ( $P < 0.05 = 0.000$ ). Health effects of illicit brews affected household food security by 59.649%. Conscious efforts by government through its agencies like are required so as to combat instances of illicit brews as a panacea to food insecurity and health problems.

### Key words

Health, Illicit alcoholic brews, House-hold, Food security, Bumula, Kanduyi, Bungoma

## **INTRODUCTION**

The relationship between illicit alcoholic local brews consumption and household food security is a critical area of concern with detrimental implications for the well-being of households globally. Illicit alcohol manifests negative effects on household food security in various ways. Firstly, excessive alcohol consumption can lead to reduced productivity and income generation among household members. When individuals engage in heavy drinking, they tend to neglect their work responsibilities, leading to decreased earnings and financial instability within the household. R., Babor, T., & Rehm, J. (2005). This, in turn, could limit the family's potential to purchase essential food items, thereby compromising their food security status.

Moreover, the financial resources spent on purchasing illicit alcohol could otherwise be allocated to purchasing nutritious food and improving dietary diversity within households. Studies have indicated that households affected by alcohol-related issues often experience financial strain, making it difficult for them to afford an adequate and balanced diet (Thombs, D. L., O'Mara, R. J., Tsukamoto, M., Rossheim, M. E., Weiler, R. M., Merves, M. L., & Goldberger, B. A. 2010). Lack of dietary diversity can contribute to malnutrition and food insecurity within these households. Therefore, there could exist a direct and indirect relationship between illicit alcoholic brews consumption and household food security in Bumula and Kanduyi Sub Counties, thus underscoring the need to conduct this study.

Alcohol use accounts for 3.5 % of worldwide demise and inability to carry out farming activities, 8.7 % of worldwide vulnerability and starvation are also linked to illicit alcohol consumption (Murray and Lopez, 2016). In 2017, 5% of deaths were as a result of alcohol consumption (Murray and Lopez, 2016). As indicated by the WHO, alcohol was liable for 4% of worldwide well-being trouble surveyed in Disability Adjusted Life Years (DALYs) and 3.2 % of all deaths in 2010 (WHO, 2016). However, the effects of illicit alcohol consumption in Bumula and Kanduyi Sub-Counties is not clear despite being actively involved in the consumption of alcohol. This study therefore focuses at establishing the effects that could be existing and manifesting as a result of alcoholic consumption.

Globally, there is a solid connection between drinking and perilous sexual desire, which can prompt HIV/AIDS and other Sexually Transmitted Diseases (STDs) which are the most common sexually transmitted diseases (WHO, 2015). The effects of alcohol utilization spill over to food security where natively prepared alcohol is the main revenue and half of a family's grain yield is utilized to prepare it (Dorji, 2015). According to the International Labour Organization (ILO), drunk persons are involved in 20- 25% of workplace inefficiencies, which is a big production stumbling block. Gururaj (2014) discovered that as the consumption of alcohol increases, so did the number of ill health due to the acute consequences of alcohol intake. According to Gururaj, 2014, about 20 -30% of ill health cases are attributable to alcohol consumption. Ill health affects food security negatively as sick people lack strength and vigor to carry out agricultural activities. Drinking habits, particularly the frequency with which significant amounts of alcohol are consumed and the sensation of intoxication, are thought to be important predictors of alcoholism (Midanik, 2015). This study therefore focuses at establishing the

consequences of illicit brews on health and food security in Kanduyi and Bumula Sub-Counties of Bungoma, Kenya.

## METHODOLOGY

The research was conducted in Bumula and Kanduyi Sub-Counties of Bungoma. The sample size was 726 respondents drawn from Bumula and Kanduyi Sub-Counties. Bumula and Kanduyi sub-counties have literacy rates of 58.5% and 68.3% respectively, with poverty indices of 51.6 % and 45.3% respectively (WHO, 2016). The main cash crop farming in the area is sugarcane. Maize, beans, and millet are also grown for subsistence in the area. However, the current patterns are indicating that while there is a decline in sugarcane, maize, beans and millet farming, the consumption of illicit brews is on rise. Tied to illicit brew consumption is ill health and decline in agricultural productivity (Wafula, 2016). Thus, the area was appropriate for the study. In order to achieve the research objective the responses were elicited from four aspects namely; effects of health consumption on mental problems, effects of health consumption on mishaps (disabilities), effect of health consumption on increased death rates, and effects of health consumption on visual impairment.

A correlation research design was used. Data was gathered at a specific point in time using questionnaire tools and interview techniques. Content technique was used to determine the validity of the tools and their reliability was established using split-half technique. In order to determine health effects of illicit brews on household food security, a five scale likert scale was used to elicit responses. A regression analysis was carried out to find out whether health effects of illicit brews had an effect on food security.

## RESULTS

The 726 respondents, mainly the household heads and key informants were sampled by stratified random sampling. Structured questionnaires were administered used to collect data from the respondents after which they were returned back and the response rate was 100%.

The study sought to establish whether alcohol utilization had an effect on mental problems which could in turn affect food security. From the findings 0.0% (0) strongly disagreed, 1.6% (6) disagreed, 0.0% (0) were not sure, 18.8% (69) agreed and 79.7% (288) strongly agreed (Table1)

**Table1: Effects of alcohol utilization on mental problems which could in turn affect food security**

	FREQUENCY(F)	PERCENTAGE (%)
Strongly agreed	488	79.7
Agreed	232	18.8
Not sure	0	0
Disagreed	6	1.6
Strongly disagreed	0	0

A high level of 98.5% (119) shows that most family heads concurred that alcohol utilization in their households has increased mental and subsequently prompted food uncertainty. Mental stability is a very important factor in determining how to make choices pertaining agricultural production. When one is unstable mentally making choices and even engaging in agricultural activities becomes a problem, thus, affecting agriculture and household food security negatively.

The second item under this objective was to determine whether alcohol utilization in their households had increased instances of disabilities resulting in mishaps and consequently food insecurity. From the findings 0.0% (0) strongly disagreed, 0.0% (0) disagreed, 0.0% (0) uncertain, 15.6% (57) agreed and 84.4% (306) strongly agreed (Table2)

**Table2: Effects of alcohol utilization on instances of handicap and food insecurity**

	FREQUENCY(F)	PERCENTAGE (%)
Strongly agreed	363	100
Agreed	306	84.4
Not sure	57	15.6
Disagreed	0	0
Strongly disagreed	0	0

100.0% (363) of family heads concurred that alcohol utilization in households has increased instances of disabilities because of mishaps, prompting food instability. Disability limits one from carrying out various hands-on activities thus affecting household food security.

The third item in this objective was to find whether alcohol utilization increased instances of death due to its chemical components which are harmful subsequently prompted food insecurity. It was seen that 0.0% (0) strongly disagreed, 0.0% (0) disagreed, 0.0% (0) were uncertain, 12.5% (45) agreed and 87.5% (318) strongly agreed (Table 3).

**Table 3: Effects of alcohol utilization on death rates**

	FREQUENCY(F)	PERCENTAGE (%)
Strongly agreed	518	87.5
Agreed	208	12.5
Not sure	0	0
Disagreed	0	0
Strongly disagreed	0	0

Overall, it was obvious that 100.0% (363) of family heads concurred that alcohol utilization in their space has enhanced instances of death because alcohol harming subsequently prompted food uncertainty

The study also explored whether alcohol utilization in their space has increased instances of visual impairment as a result of alcoholic harming in this way prompted food uncertainty. It was

understood that 0.0% (0) strongly disagreed, 1.6% (2) disagreed, 0.0% (0) were unsure, 18.8% (23) agreed and 79.7% (288) strongly agreed (Table 4).

**Table 4: Effects of alcohol utilization on visual impairment**

	FREQUENCY(F)	PERCENTAGE (%)
Strongly agreed	488	79.7
Agreed	236	18.8
Not sure	0	0
Disagreed	2	1.6
Strongly disagreed	0	0

A higher level of 98.5% (357) shows that most family heads concurred that alcohol utilization in their space has expanded instances of visual deficiency, prompting food instability. Visual impairment limits one from engaging in farming and other household income generating activities as one cannot see what to be done and how it should be done.

**Overall health effects of illicit alcohol brews on food security**

In order to determine health effects of illicit brews on household food security, a five scale likert scale was used to elicit responses. A regression analysis was carried out to find out whether health effects of illicit brews had an effect on food security as shown in table 5

**Table 5: Health Effects of Illicit Local Brews on Household Food Security in Bumula Sub County: Regression Results**

Model		Sum of Df	Mean	F	Sig.	
		Squares	Square			
1	Regression	<b>59.649</b>	1	59.649	95.82	<b>.000***</b>
	Residual	210.40	362	0.623	1	
	Total	270.05	363			
		6				

From the findings it can be noted that health effects of illicit brews on household food security were significant ( $P < 0.05 = 0.000$ ). Generally, health effects of illicit brews affected household food security by 59.649%.

**CONCLUSION**

From the findings, illicit brews affected household food security and health significantly ( $P < 0.05 = 0.000$ ). Health effects of illicit brews affected household food security by 59.649%. Therefore, conscious efforts by government through government agencies like NACADA are

required so as to combat or reduce instances of illicit brews as a panacea to food insecurity and health problem associated with illicit alcohol consumption.

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