

# **Prevalence and Predictors of Alcohol Use among Pregnant Women in Post Conflict Northern Uganda.**

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# Background

- Alcohol use during pregnancy is associated with FASD (Popova et'al, 2016)
- Frequent and binge drinking more harmful (May et'al, 2013; Ornoy et'al, 2010)
- **No known safe amount of alcohol** during pregnancy (WHO, 2014)
- WHO Recommends abstinence



# Background

- Global estimates of maternal alcohol use at 9.8% (Popova et al, 2016)
- Uganda had highest predicted prevalence of 20%

## Why Northern Uganda?

- Higher prevalence of alcohol use in general population in the region (Kabwama 2016 et al, UBOS 2001)
- Alcohol has been associated with poverty and war (Kabwama 2016; Ocaka et al 2011)
- About a third (32.5%) of people in Northern Uganda are living below the national poverty line (UBOS, 2019a).

# Methods

## Study site

Gulu, Kitgum and Pader

## Inclusion

- Women in reproductive age group 15-49
- Attending ANC services in Gulu, Kitgum and Pader

## Exclusion

- Women who refuse to participate
- Women who do not recall drinking patterns
- Women who will be drunk or unable to attend interview for any health reasons

# Sample size Determination

- Kish Leslie formula (1963)
- Infinite Popn of 30%(Namagembe, 2010)
- Sample size = 322.2
- Design effect of 1.305
- In this case  $n'' = 322 * 1.305$ (UDHS, 2005) = 420
- Sample size 420

# Methods

Design	Sample	Data Collection Methods	Concepts explored	Analysis
Quantitative	<ul style="list-style-type: none"><li>420 women seeking ANC care in Gulu Kitgum and Pader Districts</li></ul>	<ul style="list-style-type: none"><li>A structured questionnaire was administered to women</li><li>A modified WHO AUDIT questionnaire was also administered</li></ul>	<ul style="list-style-type: none"><li>Women were interviewed regarding their drinking habits, their socio demographic and other characteristics were also obtained</li></ul>	<ul style="list-style-type: none"><li>Descriptive statistics</li><li>Chisquare test</li><li>Logistic regression</li></ul>

# Methodology Cont'd- Sample size

District	Facility	Number of Facilities	ANC Attendees	Sample Size
Gulu	HCII	46	4341	61
	HCIII	16	3792	53
	HCIV	2	648	10
	Hospital	3	7833	110
Kitgum	HCII	15	1482	20
	HCIII	10	3412	48
	HCIV	1	712	12
	Hospital	2	3184	44
Pader	HCII	4	346	5
	HCIII	13	3215	45
	HCIV	2	834	12
<b>Grand Total</b>		<b>114</b>	<b>29,799</b>	<b>420</b>

# Results

## Prevalence

Alcohol Use	Number(Percent)
Lifetime Abstinence	194 (46.2%)
Ever Consumed Alcohol	226( 53.8%)
Current alcohol use(any amount)	99(23.6%)
Abandoned Alcohol on Pregnancy recognition	33(10%)
Binge drinkers	29.3%

# Results

## Prevalence(Audit)

Forms of Alcohol Use	Percentage
Problem drinkers	11%
Hazardous drinkers	8%
Alcohol dependants	4%

# Predictors of alcohol use(Any amount)

Variable	P-value	OR(95%CI)
Residence	0.01	0.39(0.17 to 0.91)
Parity	0.018	5.4(1.3 to 22.5)
Ever recieved information on drinking during pregnancy	0.002	4.08(1.6 to 10.1)
<b>Attitude</b>		
Positive/fair	0.010	0.114(-0.02 to 0.59)
My family wouldnt approve of me drinking	0.002	0.05(0.009 to 0.34)

# Results

## Predictors of Frequent Drinking

Variable	P-Value	OR(95%CI)
My friends and community would approve of me drinking	0.017	7.95(1.45 to 43.3)
Specific knowledge	0.008	11.2(1.8 to 67.0)

# Results

## Predictors of Binge drinking

Variable	P-Value	OR(95%CI)
Had no knowledge of anything that could harm baby	0.004	14.8(2.32 to 94.9)
My family wouldnt approve of me drinking	0.04	0.2(0.04 to 0.93)
Education		16.4(0.80 to 335.4)

# Discussion

- 23.6% reported current alcohol use(any amount)
- Cheap home made brews readily available
- Other forms of drinking less commonly reported
- Influence of community and social networks similar to other studies([Pati etal 2018](#))
- Paradoxical relationship betweenknowledge and alcohol use

# Methodological Considerations

## Weaknesses

- Self report
- Most alcohol consumed home brewed

## Mitigation

- Compared with data from other studies
- Used WHO WHS

# Conclusion

- Alcohol use (any amount) during pregnancy is moderate while alcohol dependence, problematic and hazardous drinking is relatively low
- Knowledge and attitude were important predictors of alcohol use
- While alleviating alcohol use, development partners and relevant government departments should consider interventions that increase knowledge and risk perception on maternal drinking. Other risk factors that predict alcohol use during pregnancy such as prior alcohol use, residence and parity should be mitigated or eliminated