

London School of Hygiene & Tropical Medicine

Improving Health Worldwide

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE





Who Pays for the Drink? Alcohol Use and Family Harm in India

Abhijit Nadkarni



Story

- 38-year-old daily-wage worker; drinks most evenings; 20–30% income on alcohol
- Wife: skips meals, loans from neighbours, occasional violence, anxiety, poor sleep
- Children: irregular school, one underweight with recurrent infections



The question is bigger than: “How much does India drink?”



WHO PAYS?

The central question



A number that hides a question

1.45%

of India's GDP lost each year
to alcohol-attributable harm

The Roadmap

The Landscape

How much India drinks, who drinks, and where

The Economic Burden

What alcohol costs households and the national economy, net of tax revenue

Family Harm

The documented association between male drinking and family harm

Policy Responses

What prohibition has and hasn't achieved

Limitations of the Evidence Base

Causality

Nearly all cited studies are cross-sectional (NFHS, DHS). They establish robust association, not proven causal direction between alcohol use and violence.

Measurement

Alcohol use and its impact are both self-reported and stigmatized; true prevalence of both is likely underestimated, particularly for women reporting on their own experience or their partner's behavior.

Heterogeneity

Different studies use different definitions, recall windows and covariate sets, producing odds ratios that are directionally consistent but not directly poolable.

Coverage gaps

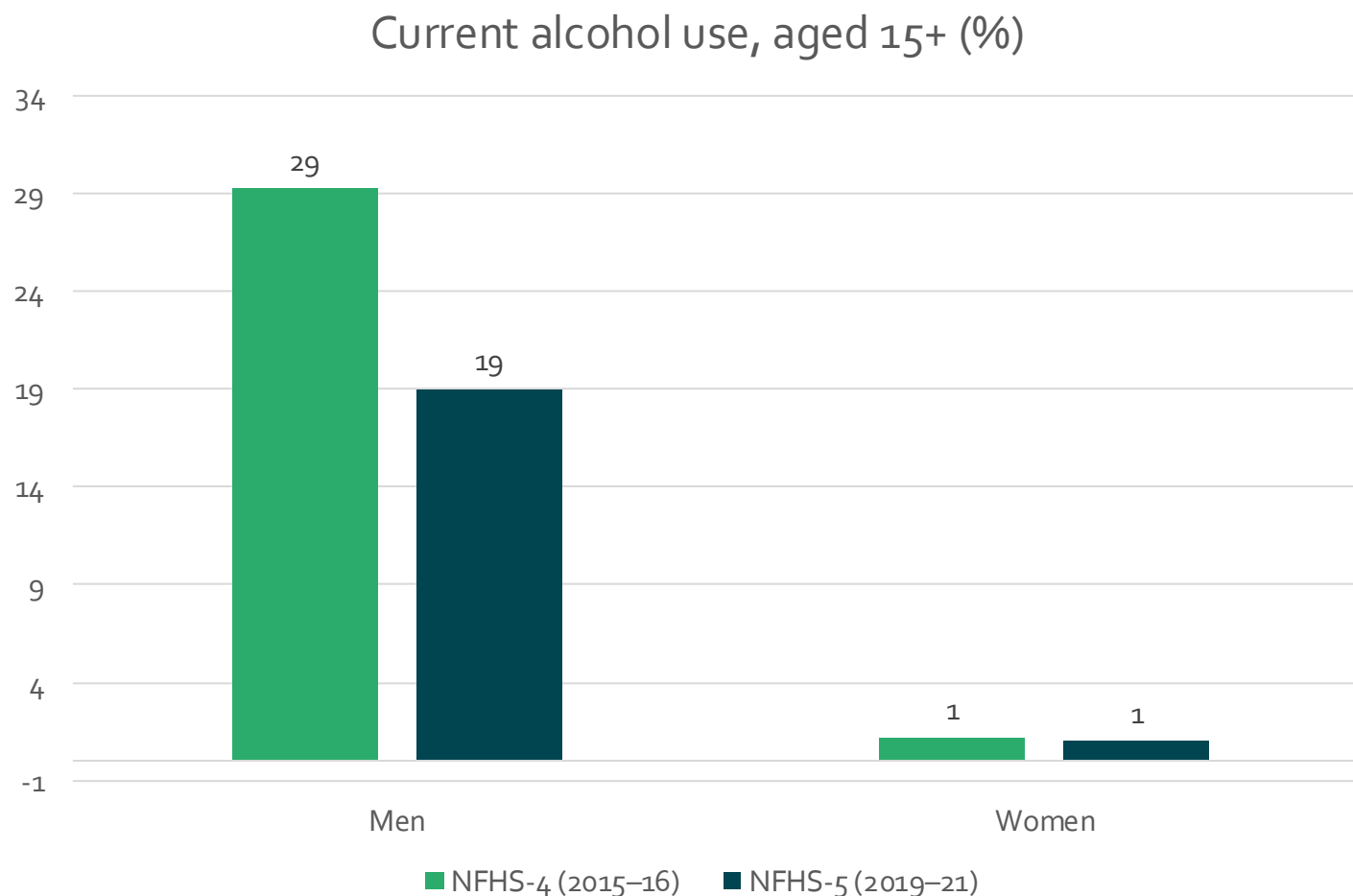
Far less is known about women's own alcohol use and its consequences, and about harm inside same-sex or non-marital households, than about husband-to-wife violence in married couples.

The Landscape of Alcohol Use in India

Who drinks, how much, and where



Reported Prevalence



- Self-reported "current use" — survey-based figures likely understate true consumption due to social stigma, especially among women.
- Rural prevalence exceeds urban for both sexes (men: 19.9% rural vs 16.5% urban).
- Survey declines contrast with rising alcohol sales volumes reported by industry bodies — a discrepancy worth treating with caution.

Source: NFHS-4 (2015–16) and NFHS-5 (2019–21), Ministry of Health & Family Welfare, Government of India.

India does not have one alcohol problem

Alcohol use varies markedly across states, districts, sex, age, rural/urban residence and socioeconomic context.

Higher-use districts
 $\geq 40\%$

Intermediate
30–40%

Lower-use
<30%

Geography Complicates the Story

Northeast India

Highest for both sexes

Arunachal Pradesh, Tripura, Mizoram and Sikkim post the highest male AND female drinking rates in the country.

Southern & Central states

>45% of men

Telangana, Chhattisgarh and Tamil Nadu are among states where over 45% of men report current alcohol use.

The "dry state" paradox

~37% of men, Manipur

Manipur bans alcohol outright, yet roughly a third of men still report drinking — legal status and lived behavior diverge sharply.

Rural, Poorer Households Carry the Heavier Load

Rural vs. urban

20% of rural men currently drink vs. 16.5% of urban men — the gap holds for women too (1.6% vs. 0.6%).

Income gradient

In rural areas, the share of household spend going to alcohol rises steadily from the poorest to the richest quintile — but the poorest households can least absorb it.

What people drink

Country liquor dominates: consumed roughly 7 times more than toddy and 3.5 times more than branded Indian-Made Foreign Liquor — a cheaper, less regulated, higher-risk category.

The Economic Burden

Who pays in rupees — the household ledger and the national one

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



The first place the cost is redistributed is the household



A Small Line Item With Outsized Displacement Effects

~1%

of average household
monthly spend goes
to alcohol nationally

1.14%

in rural households — almost
double the urban share (0.62%)

The crowding-out effect!

Household financial impact

Kerala study: alcohol-dependent vs non-dependent households

Issues	β	Sig.	Odds Ratio
Difficulty to Meet Daily Expenditure	4.716	P<.001	111.67
Difficulty to Construct a Home	0.402	P=.041	1.494
Difficulty to Purchase Consumer Durables	1.784	p<.001	5.954
Lifestyle-related loss of property	1.982	P<.001	7.257



At the National Scale, the Numbers Compound

\$48.1B

Cost to the health system

Direct treatment of alcohol-attributable liver disease, cancers and road-traffic injuries.

\$1,867B

Total societal burden

Health costs, out-of-pocket spending, and productivity losses combined, 2011–2050.

\$1,506B

Net loss after tax revenue

Equivalent to 1.45% of GDP per year
— even after crediting the state's
excise earnings.

Projected cumulative burden, 2011–2050 (Jyani et al., 2019)

The State Collects the Revenue; Society Absorbs the Cost

What the state gains

Excise duty on alcohol is one of the largest own-revenue sources for most Indian states — commonly 10–15% of state tax receipts.

What society loses

Even after netting out every rupee of excise revenue collected, alcohol still costs the Indian economy an estimated 1.45% of GDP every year.

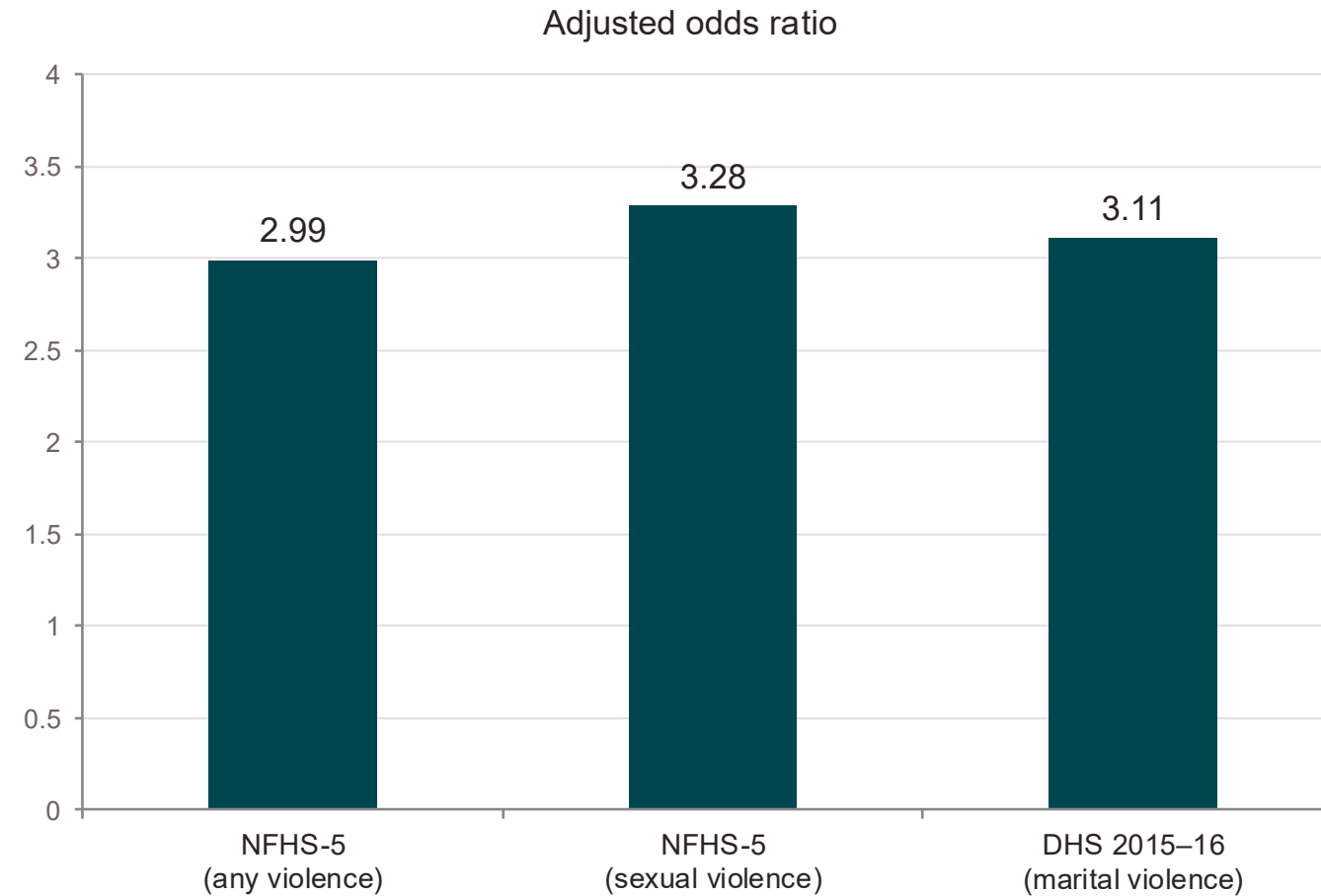
Family Harm

Who pays in safety — the alcohol–violence association

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



Husbands' Drinking Strongest Behavioural Predictor of IPV



Sources: *Discover Public Health* (2025), NFHS-5; PMC11193235, NFHS-5; PMC9594465, India DHS 2015–16.

The Pattern Holds Across Violence Types

Physical violence

29%

of ever-married women in India reported physical violence, 2019–21. Husbands who are "often" or "sometimes" drunk are significantly more likely to be perpetrators than those who never drink.

Sexual violence

3.28x

higher adjusted odds of sexual violence when a partner drinks — the strongest of the three violence types tested against alcohol use.

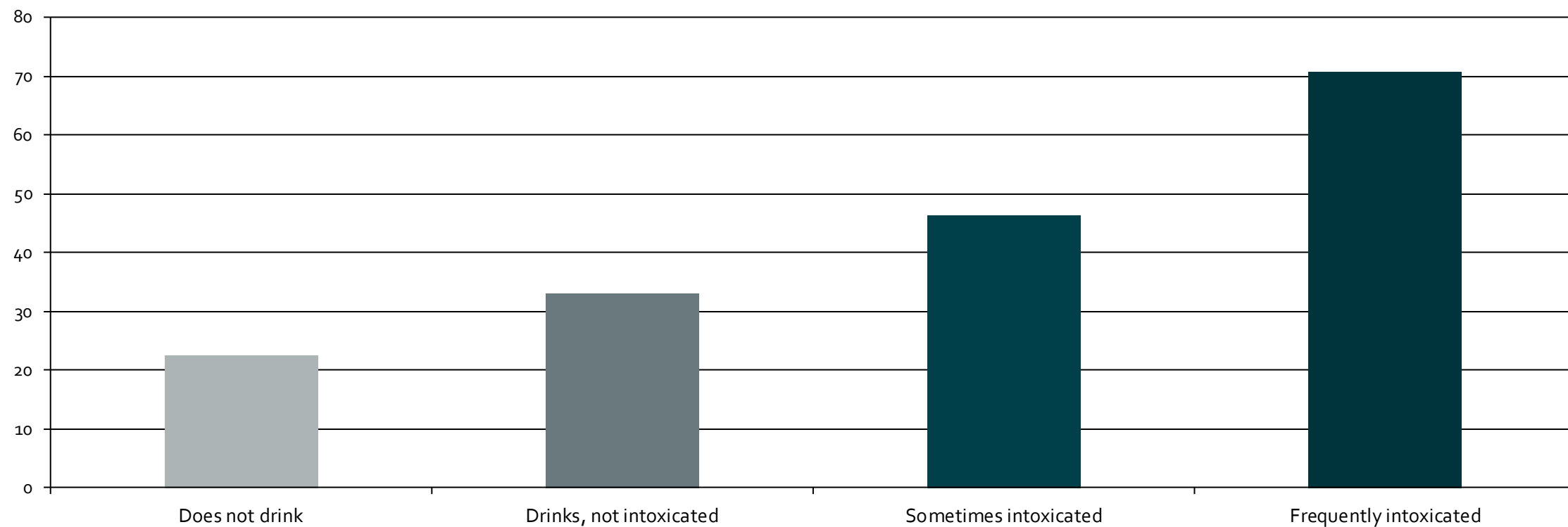
Emotional violence

Higher, rural

Husbands who are often or sometimes drunk show higher rates of emotional violence; prevalence is highest in rural areas and in southern and eastern states.

Spousal violence

IPV victimisation (%)



Source: NFHS-5 analysis: among married women

The Gradient is Not Subtle

14.12×

when husband frequently becomes intoxicated

3.56×

husband sometimes becomes intoxicated

1.54×

husband drinks but is not intoxicated

The family burden around childbirth

18%

postpartum IPV
prevalence in a low-
income Mumbai sample

42%

family maltreatment prevalence

2.0×

adjusted odds of postpartum IPV when
husband used alcohol

Children are not bystanders

44.5%

reporting any harm from others' drinking

15.4%

reporting financial harm

9.7%

reporting physical harm

The Burden Is Not Evenly Distributed



Caste

Scheduled Caste women face higher IPV prevalence than General-category women; husband's alcohol consumption is one of the largest measurable contributors to that gap.



Poverty & co-occurrence

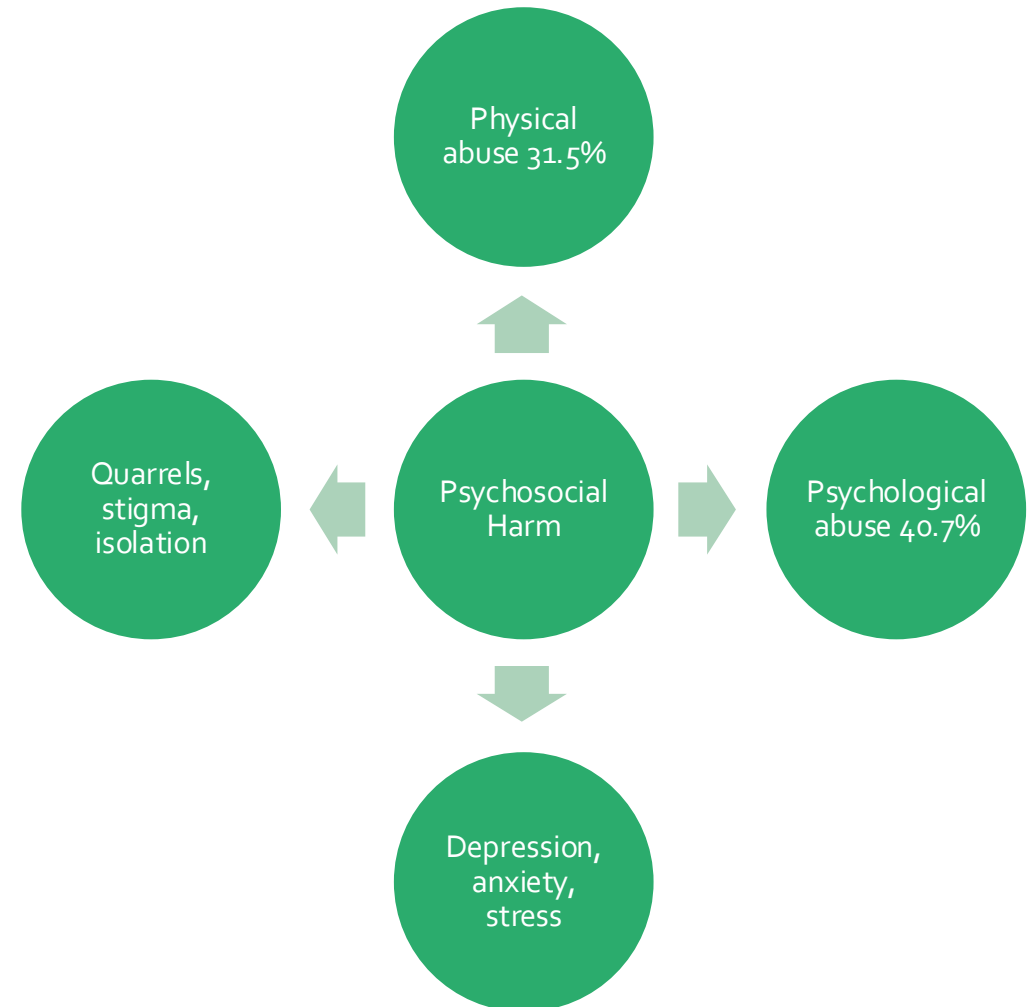
Poor families face significantly higher odds of domestic violence when male alcohol use co-occurs with tobacco use or child stunting — harms cluster together in the same households.



Region

Domestic violence linked to male alcohol use is most prevalent in southern Indian families (20.9%), even though the South is not where prohibition policy has concentrated.

Psychosocial Harm



Caregiver burden



- 78.75% moderate-to-severe burden
- Burden ↑ with quantity consumed & alcohol expenditure
- Mostly women: manage finances, children, health system, own mental health



The gendered question: why does his drinking become her problem?

Alcohol can amplify risk and severity — but the underlying violence is also about power.



Policy Responses

What prohibition has achieved — and what the evidence favors instead

Prohibition: The Most-Tried, Least-Effective Lever

Bihar

Banned April 2016

- ≈₹3,500 crore in annual excise revenue forgone
- ~15M litres of country liquor and 20M litres of IMFL seized by March 2025 — seizures still rising
- 190 confirmed deaths from illicit/spurious liquor since the ban
- Post-ban clinical data show rising opioid and cannabis use among substance-use patients

Gujarat

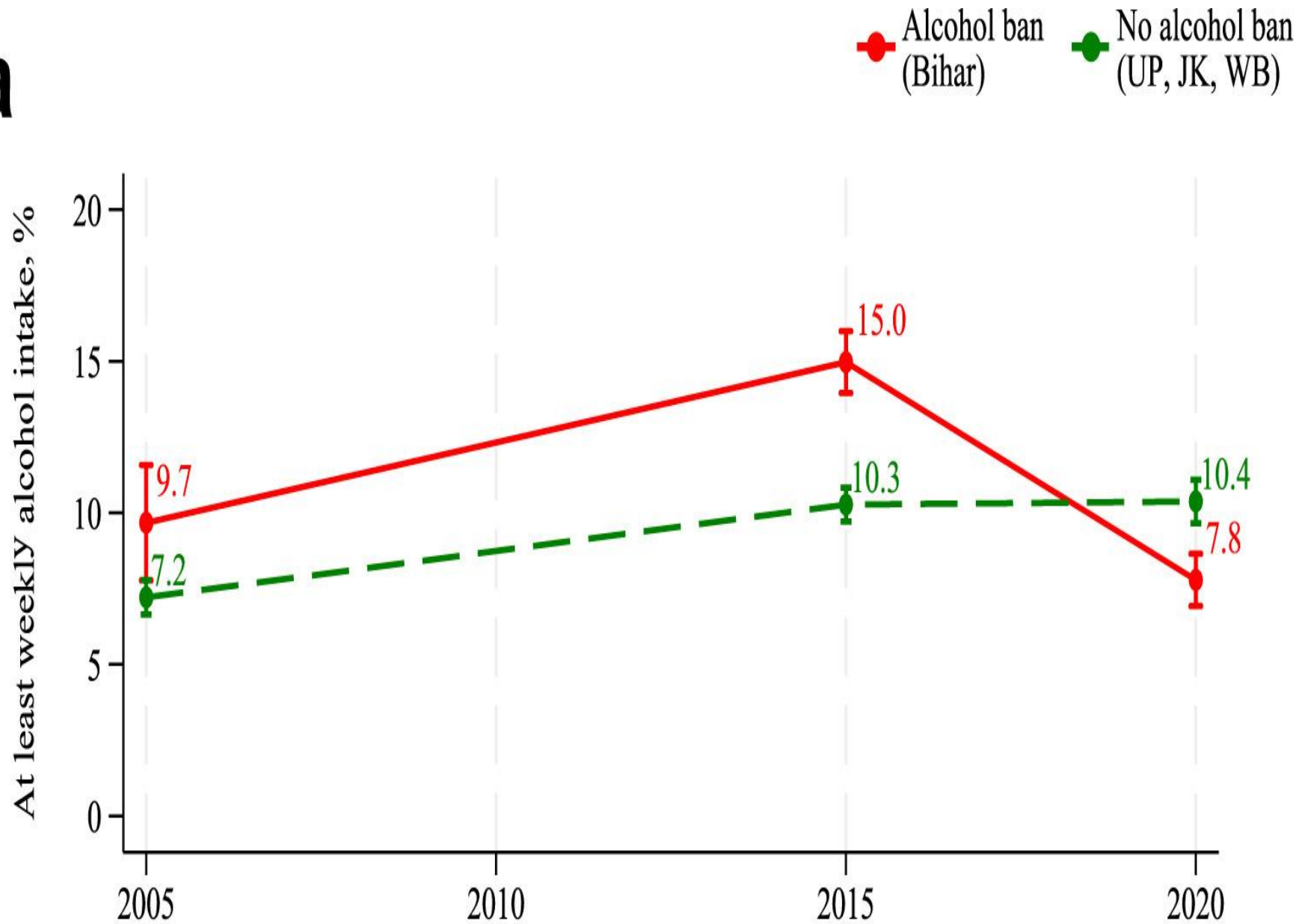
Dry since 1960

- Longest-running prohibition regime in India
- Entrenched smuggling networks from Rajasthan, Maharashtra and Madhya Pradesh
- 400+ deaths linked to illicit liquor since the ban began
- A single 2009 hooch tragedy killed 136 people in the state

- Lower overweight/obesity among males

a

- Reduced experiences of emotional/sexual violence among females



Socio-economic outcomes

- 67% fall in kidnapping for ransom
- 28% fall in murder
- 23% fall in dacoity
- Substantial increase in the purchase of milk and milk products
- Considerable increase in lifestyle expenditure

Source: ADRI (2017), "Economic Survey of Government of Bihar", Volume II, prepared by the Asian Development Research Institute (ADRI); Patna: Finance Department, Govt. of Bihar.

Bihar's liquor ban: A cautionary tale

The State government is losing revenue, illicit liquor is flourishing, and the courts are flooded with alcohol-related cases.

Published : Nov 26, 2024 19:28 IST - 6 MINS READ



ANAND MISHRA

Anand Mishra currently serves as Political Editor, Frontline.

 **COMMENTS (0)**

 **SHARE**  **READ LATER**



So, Who Pays for the Drink?

The State

GAINS

Excise revenue — a major, visible line in most state budgets.

The Household

LOSES

Food security, savings, and human-capital investment crowded out, disproportionately among the poor.

Women & Children

PAY MOST

Roughly 3x higher odds of intimate-partner violence where the husband drinks — a cost with no line in any budget.

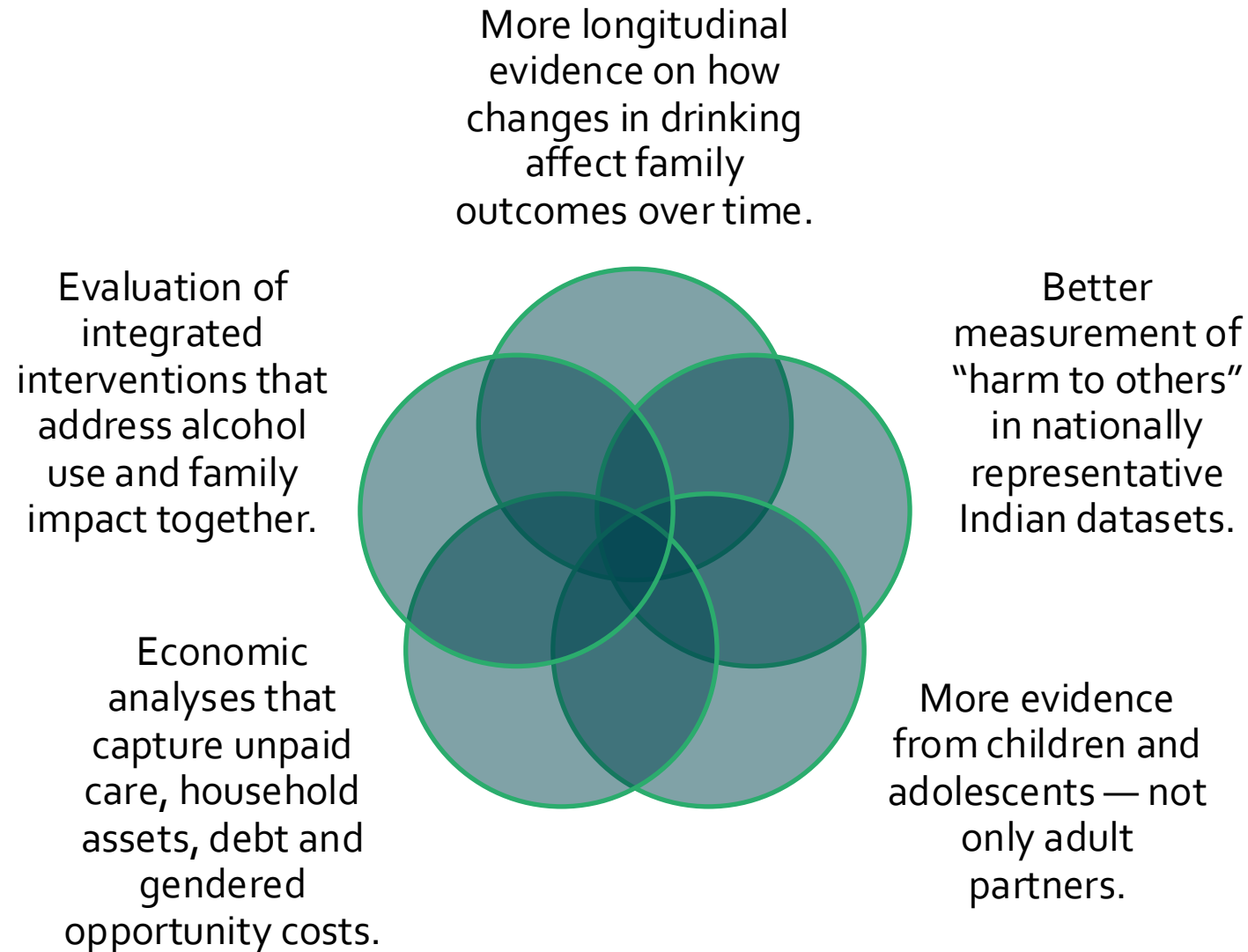
My Research: Family Harm & Interventions Tested



- Persistent AUD was strongly associated with marital problems
- AFMs accommodated, adapted financially, avoided conflict, covertly intervened and tried to manage the drinker's behaviour
- Stigma deepens the burden, silences family caregivers and blocks them from seeking support
- We built a family-facing intervention (SAFE)



What is still missing from the Indian evidence?



What would a family-centred alcohol policy look like in India?

REDUCE HARMFUL USE

- Pricing
- Availability
- Marketing controls

TREAT AUD

- Primary care
- Task-sharing
- Accessible psychosocial & pharmacological care

PROTECT FAMILIES

- IPV identification
- Partner support
- Child safeguarding

CHANGE SYSTEMS

- Integrated services
- Community prevention
- Reinvest alcohol revenues



Who ultimately pays for the drink?

Not, primarily, the person who pours it — the household budget, and the women and children inside that household.
