



A NEW CHALLENGE FOR SOUTHERN AFRICA:

*Health, Economic and Social Costs of Alcohol Use
in Southern Africa*



Neo K Morojele, PhD

Medical Research Council
SOUTH AFRICA



OVERVIEW

- **Background**
- **Alcohol Use in Southern Africa**
- **Women and Harmful Alcohol Consumption**
- **Youth and Harmful Alcohol Consumption**
- **Conclusion**



Alcohol Consumption: Pre-Colonial Era

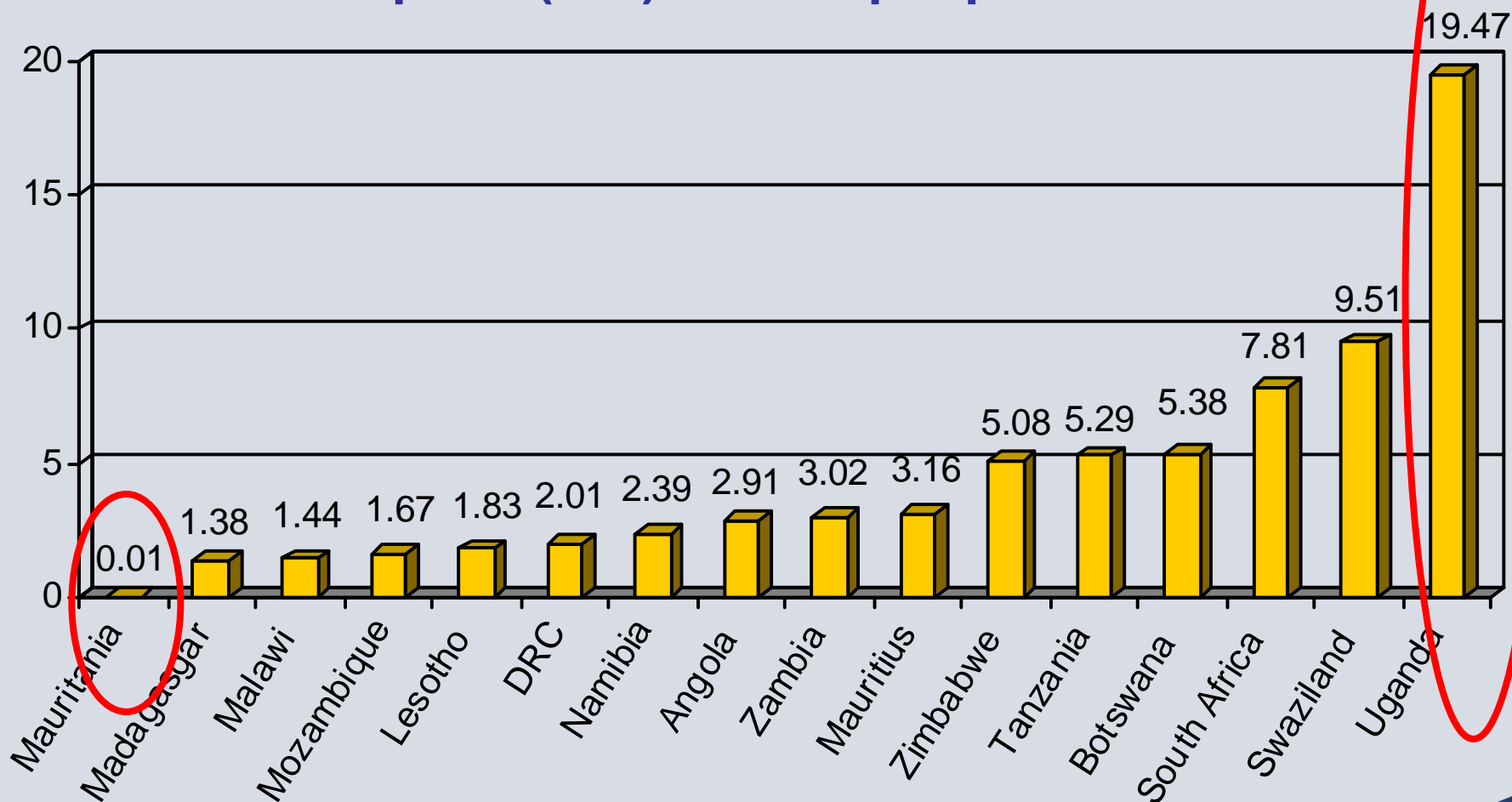
- Use primarily for ceremonial purposes
- Low alcohol beverages consumed
- Alcohol problems and solitary drinking were rare
- Women of child-bearing age, youth and children prohibited from drinking



Alcohol Consumption: 20th and 21st Century

- Alcohol consumption characterised by episodic or binge drinking: “risky single drinking occasion” (WHO, 2004)
- Southern Africans have amongst the highest rates of consumption of alcohol in the world

Total recorded alcohol per capita consumption (15+) in litres per pure alcohol





Un-Recorded Consumption

- Unrecorded consumption amounts to approximately 50% of all alcohol consumed (Rehm et al., 2003).
- It includes:
 - a) Home produced beverages
 - b) Importation (legal and illegal)
 - c) Tourist consumption
 - d) Beverages with alcohol content lower than legal definition (WHO, 2004)

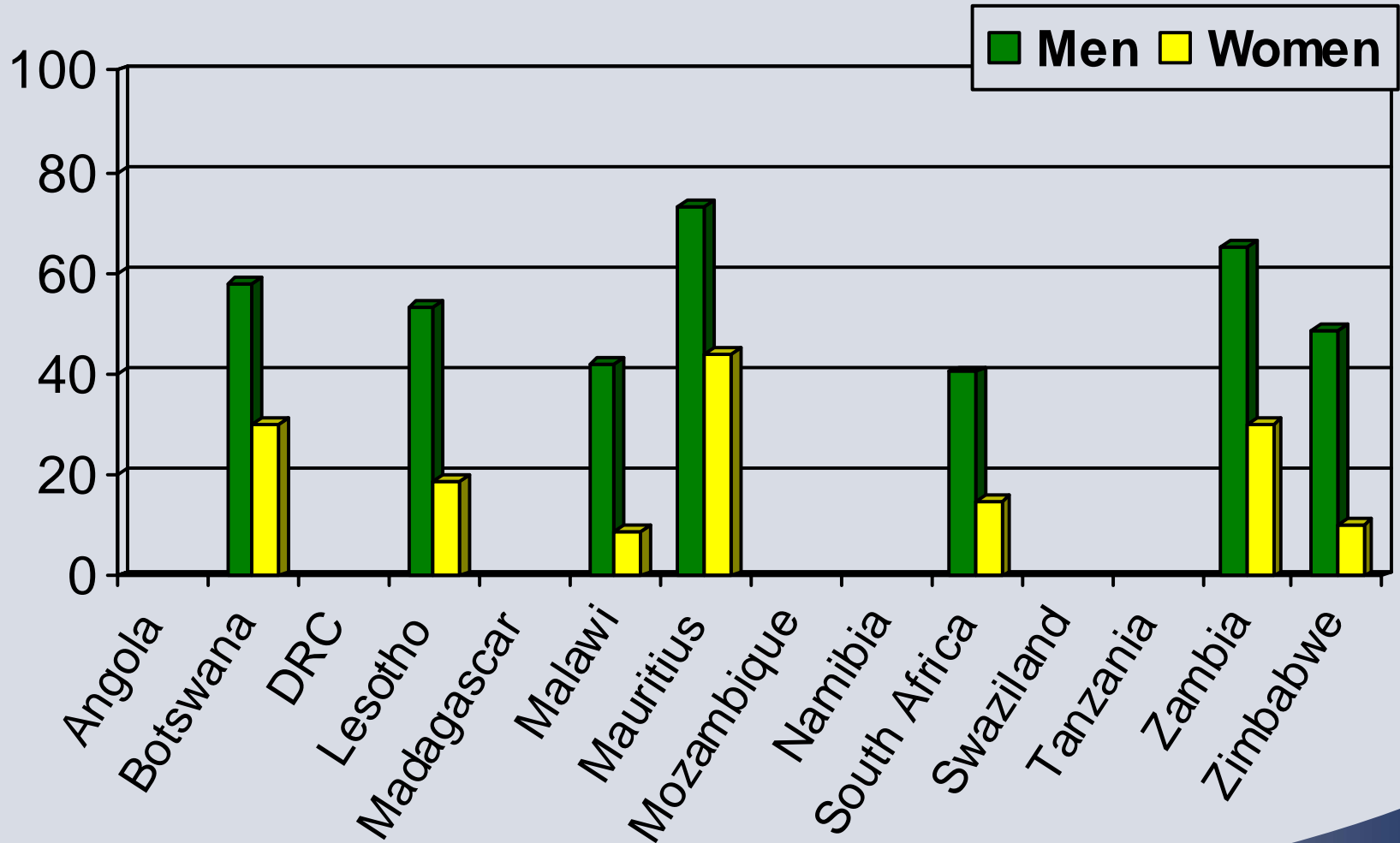


Non-commercially Brewed Beverages

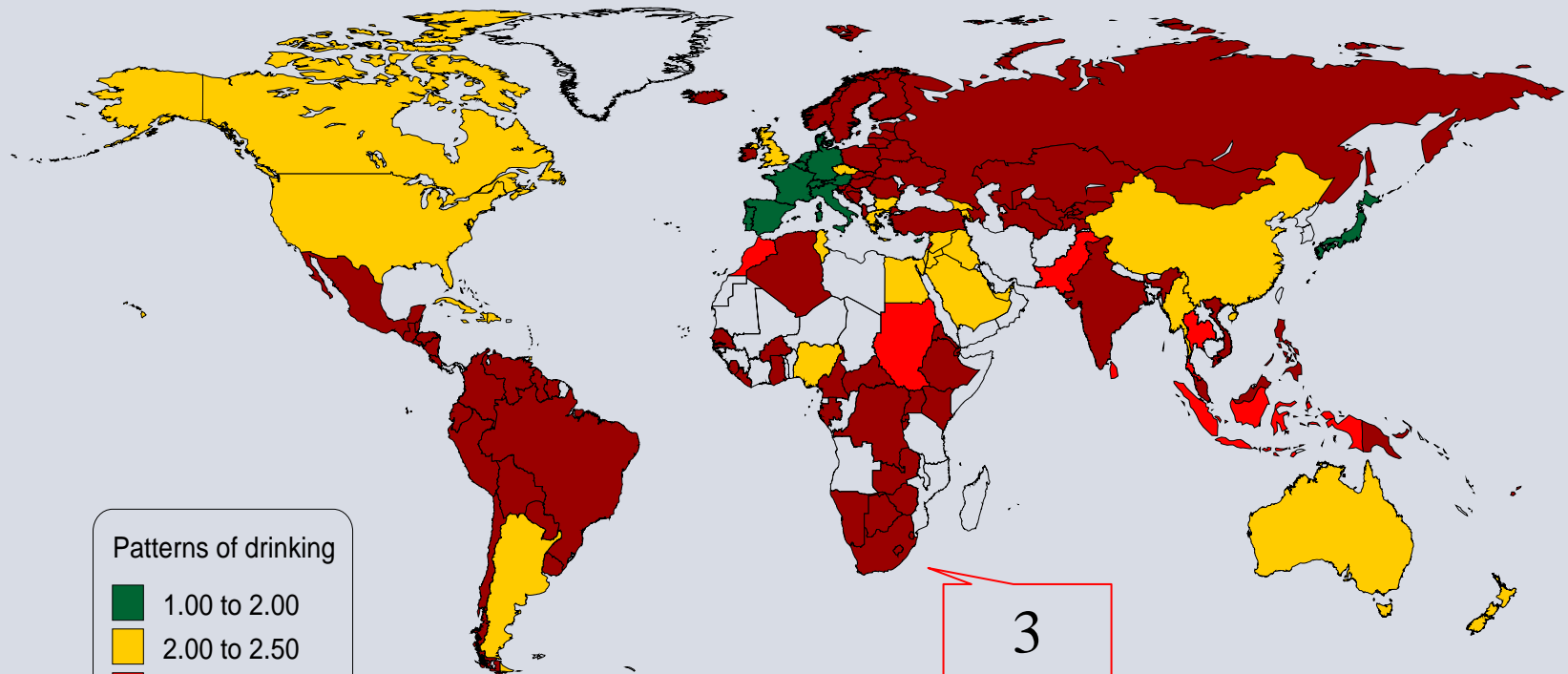
- Palm nut (e.g. Angola, DRC)
- Sorghum (e.g. Botswana, Lesotho, Swaziland, Zambia)
- Industrially produced sorghum beer (Chibuku, *Shake-Shake*: e.g. Botswana, Zambia)
- Fruit (e.g. grapes, morula – Botswana)
- Additives to increase potency; speed up fermentation process



Alcohol Use Among Adults in SADC Countries



Patterns of Drinking (Ezatti *et al.* 2004)



Patterns of drinking

- 1.00 to 2.00
- 2.00 to 2.50
- 2.50 to 3.00
- 3.00 to 4.00

3

1: Least hazardous; Regular drinking, often with meals and without heavy drinking bouts

4: Most hazardous: Infrequent but heavy drinking



EFFECTS OF ALCOHOL MISUSE

The misuse of alcohol has adverse social, health and economic effects

Most of the effects are due to the characteristic pattern of binge or heavy episodic drinking and resultant intoxication



HEALTH EFFECTS

Alcohol consumption has been linked to more than 60 disease conditions (WHO, 2004), including:

- Cancers
- Cardio-vascular disease
- Liver cirrhosis
- Mental conditions
- Depression
- Coronary heart disease
- HIV/AIDS



Acute Adverse Health Consequences

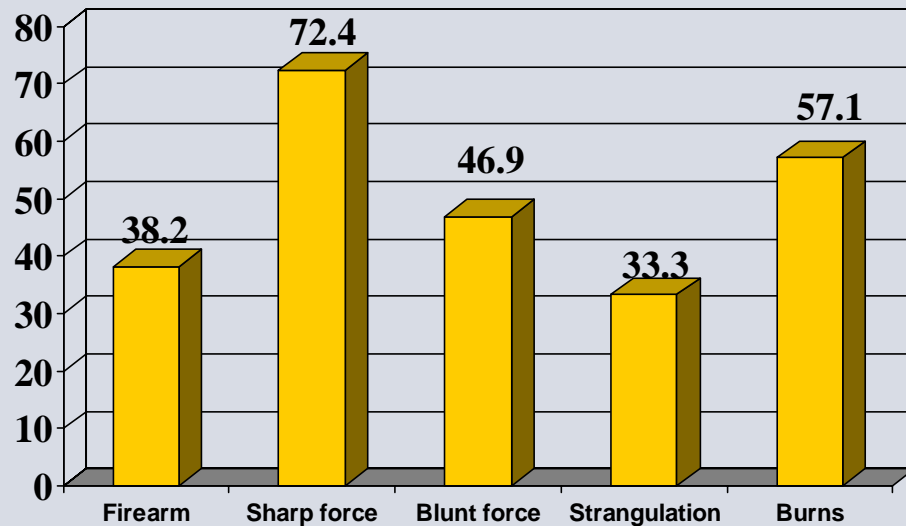
- Inter-personal violence
- Traffic-related injuries and fatalities
- Sexual risk behaviour



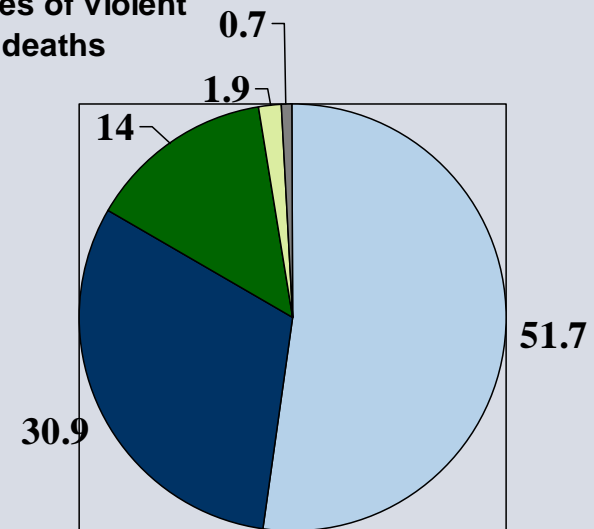
HEALTH COSTS: INTER-PERSONAL VIOLENCE

Alcohol-relatedness of Violent Deaths in South Africa

Proportion of cases with positive BACs



Causes of violent deaths

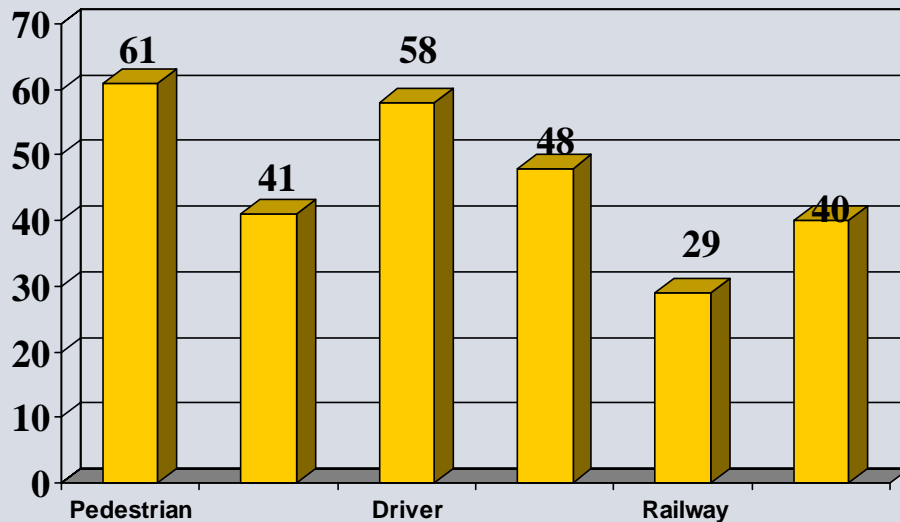




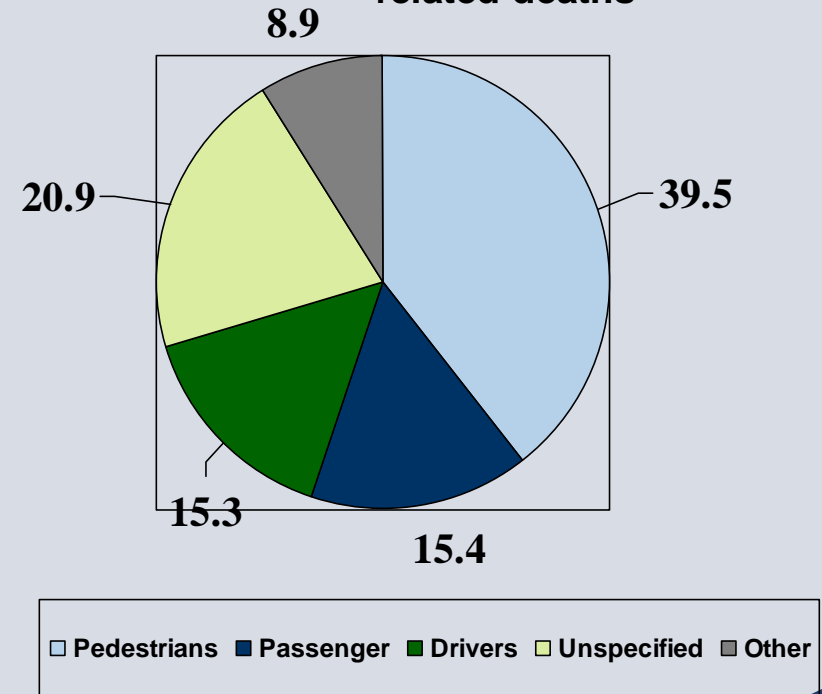
HEALTH COSTS: TRAFFIC RELATED INJURIES AND FATALITIES

Alcohol-relatedness of Traffic-Related Deaths in South Africa

Proportion of cases with positive BACs



Leading categories of transport-related deaths

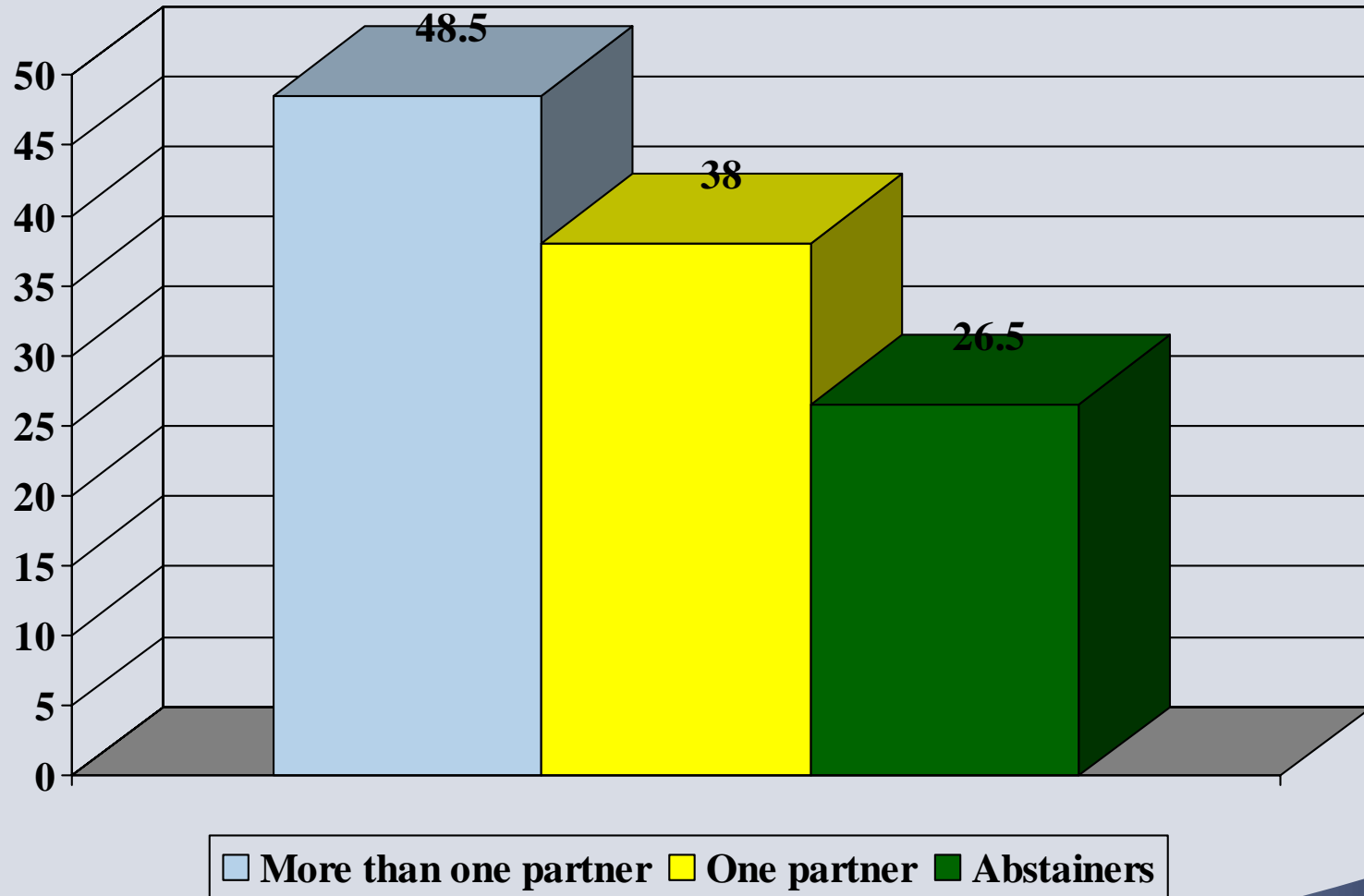




HEALTH COSTS: HIVAIDS

- Misuse of alcohol is a key determinant of sexual risk behaviour, and consequently an indirect contributor to HIV transmission in many sub-Saharan countries (e.g Fritz et al., 2002; Weiser et al., 2006).

Multiple Sexual Partners and Alcohol Consumption



Source: Nelson Mandela/HSRC HIV/AIDS survey (Shisana *et al.*, 2004)
building a healthy nation through research

Qualitative Interpretation of Findings

Strong link is a function of:

- Consumption patterns: Quantity/intoxication related most strongly to sexual risk behaviours
- Consumption settings: Drinking venues (opportunities for meeting partners; environment)
- Consuming in presence of whom: casual partners/prospective partners/sex workers
- Characteristics of consumer: younger, inexperienced, male
- Alcohol expectancies of consumer: i.e. perceptions (and myths) about alcohol's influence on sexual appeal, drive, performance.



ECONOMIC COSTS: COSTS TO SOCIETY

- Lost productivity (e.g. due to loss from alcohol-related illness, premature death and crime)
- Health care expenditure (e.g. treatment of alcohol abuse and dependence; treatment of alcohol-related illnesses)
- Property and administrative costs of alcohol-related motor car accidents
- Criminal justice system costs of alcohol-related crime

There is a lack of costing studies in southern Africa, but alcohol has been estimated to cost South Africa in excess of R10 billion per annum, or between 1% and 2% of GDP (Parry, Myers & Thiede, 2003).



ECONOMIC COSTS: COSTS TO THE INDIVIDUAL

- Drinking costs money. Often drinking takes precedence over other household needs, leaving the family unable to afford basic goods and services.
- Drinking often leads to loss of earnings and poverty, due to:
 - **Absenteeism from work**
 - **Lack of motivation**
 - **Loss of employment**

RISK FACTORS:

- **Societal norms**
- **Urbanisation**
- **Unemployment**
- **Accessibility**
- **Advertising**



Alcohol Availability

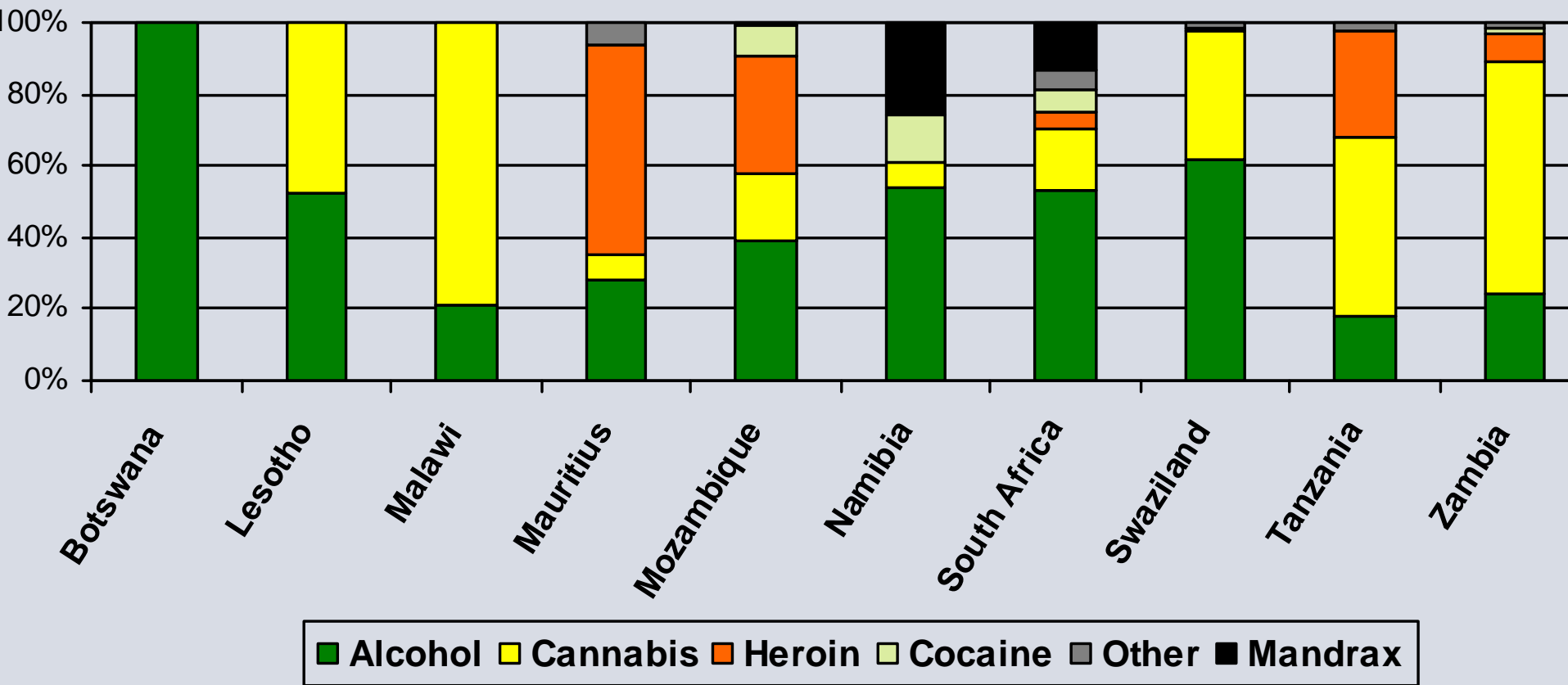
- Readily available
- Attractive taste – coolers, cider, liqueurs
- Relatively cheap, especially poor quality variants
- Marketing using image of sophisticated young women
- Viable small business, often by women





TREATMENT

Proportion of Patients in Treatment for Alcohol and Drug-related Problems in SADC Countries





ALCOHOL CONSUMPTION AMONG YOUNG PEOPLE



Background

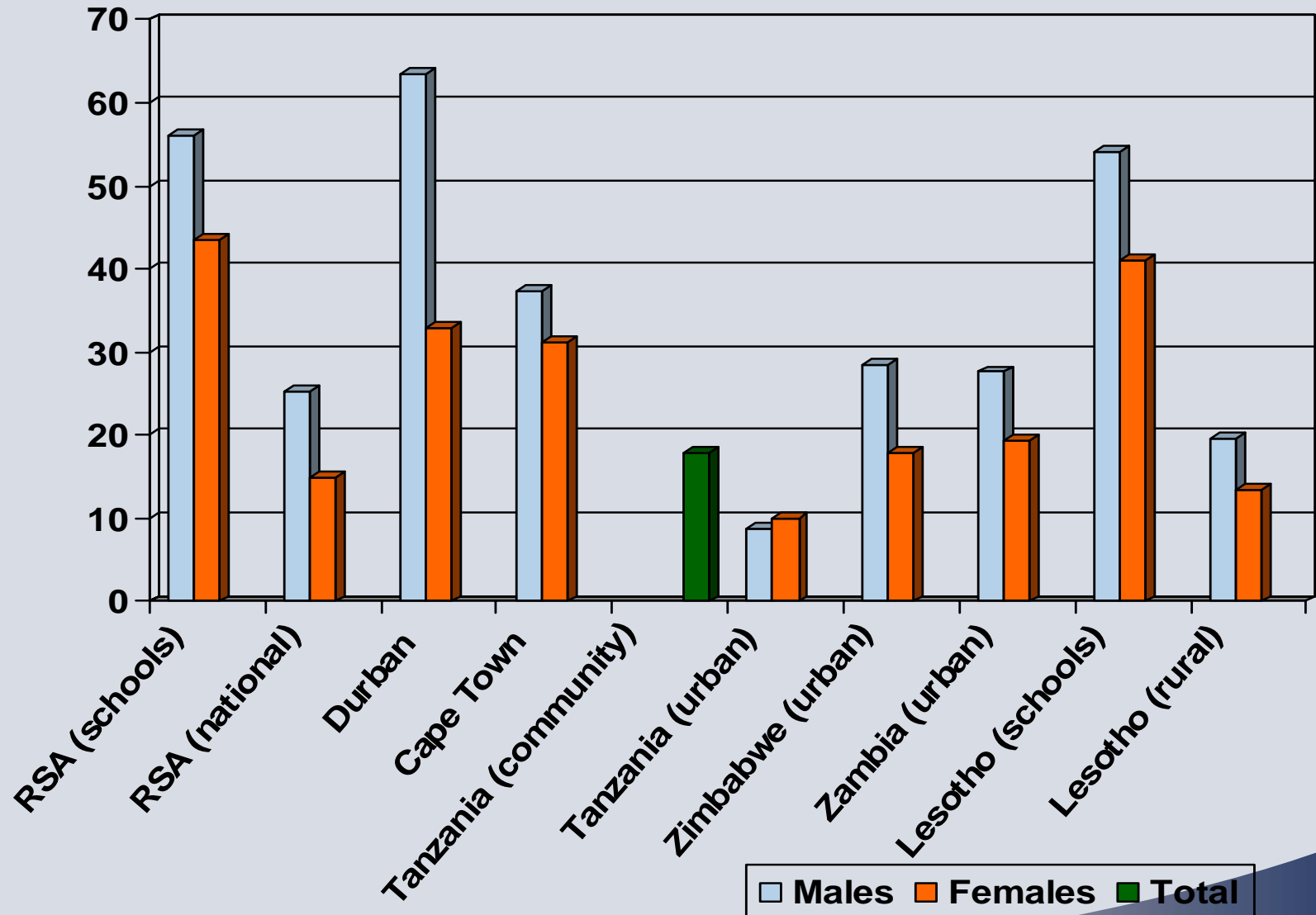
There is substantial inter-country variation in rates of alcohol consumption by young people in southern Africa

Rates of alcohol consumption have been increasing significantly among young people (e.g. Eide & Acuda, 1996; Flisher et al., 2003; Strijdom & Agnell, 1997)

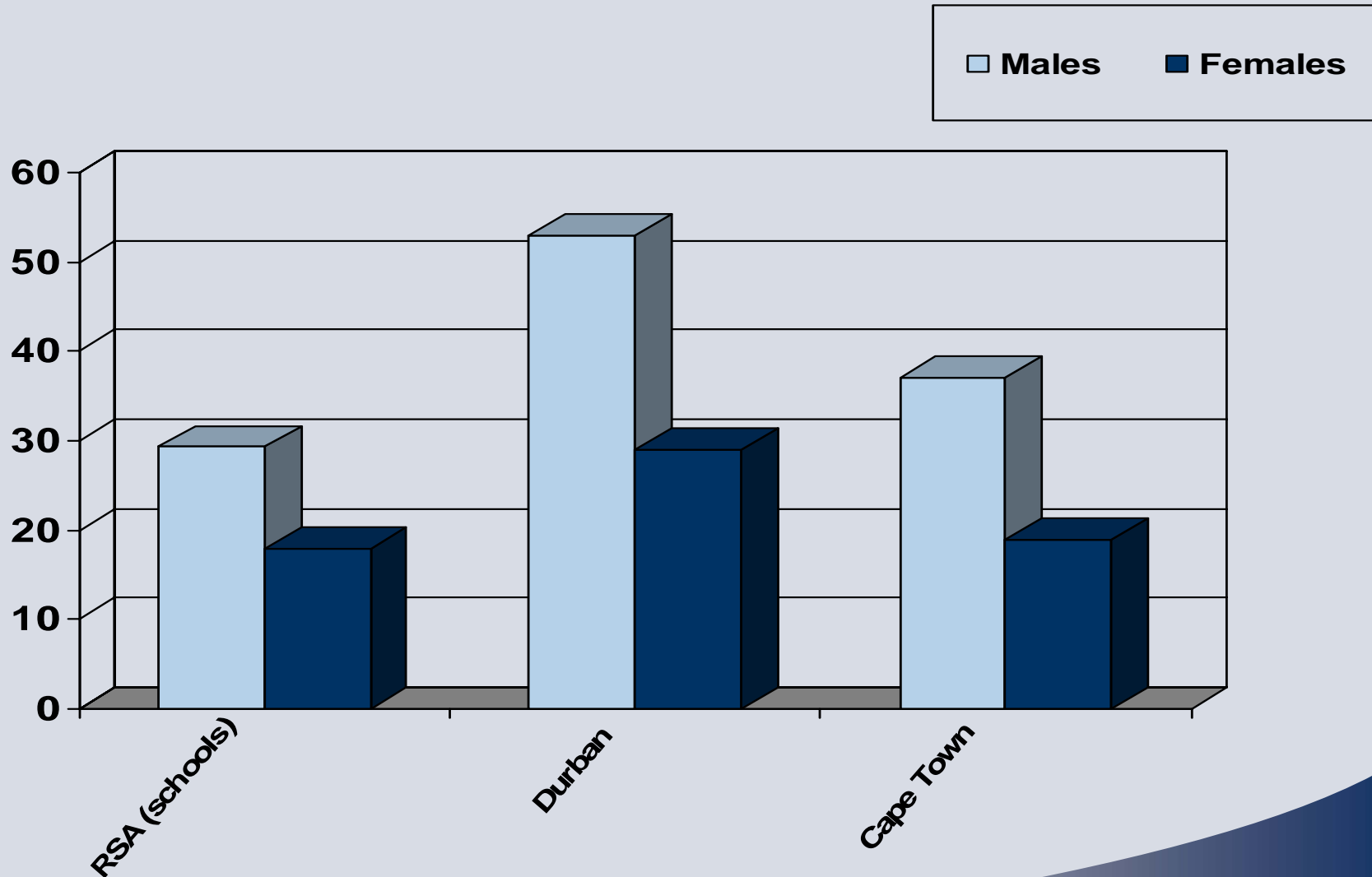
Binge drinking (e.g. consumption of 5 or more drinks per occasion) leading to drunkenness, is most common pattern of alcohol consumption

Beverages consumed vary – but mainly beer for males and cider, wine, coolers for females, and homebrew among rural and lower-income youth (WHO, 2003).

Prevalence of Lifetime Alcohol Use in Selected Surveys



Prevalence of adolescent binge drinking (consumption of 5 or more drinks on one occasion) in selected school surveys





Health and social consequences of harmful use of alcohol by young people

Alcohol problems experienced by young people are mainly a result of intoxication. The most serious problems are:

- violence and victimisation
- unintentional and intentional injuries and non-natural deaths
- sexual risk behaviour

However, some young people also require treatment for alcohol-related problems

Percentage of adolescent non-, infrequent and frequent drinkers reporting nil, 1-2 and 3-5 violent acts



■ Never victim ■ 1-2 acts ■ 3-5 acts

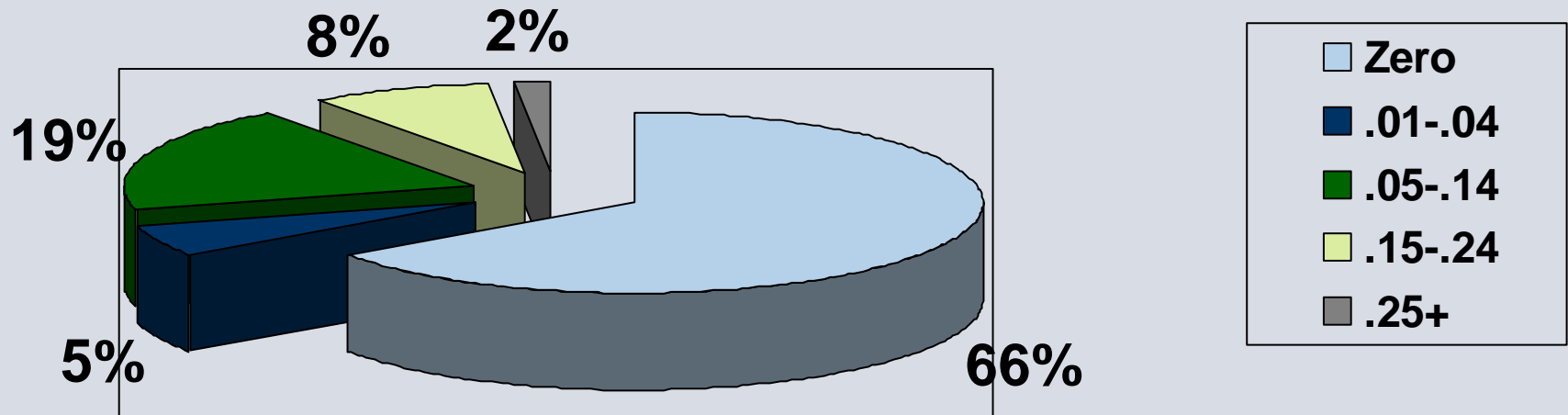
Mortality



- **National Injury Mortality Surveillance System (NIMSS) – MRC/UNISA**
- **Mortuary-based (x32) system on non-natural deaths (e.g. homicide, suicide, transport related)**
- **Also assess Blood Alcohol Concentrations (BAC): 0.05 gm/100ml (legal limit for driving)**
- **Adolescents (2001) - 70% male - Leading causes of death:**
 - **Homicide (36.8%)**
 - **Transport collisions (33.2%)**
- **34.7% had +ve BACs**
- **Over 80% with +ve BACs were over .05 gm/100ml (legal limit for driving)**
- **Highest number of BAC +ve cases aged 17-19 years**

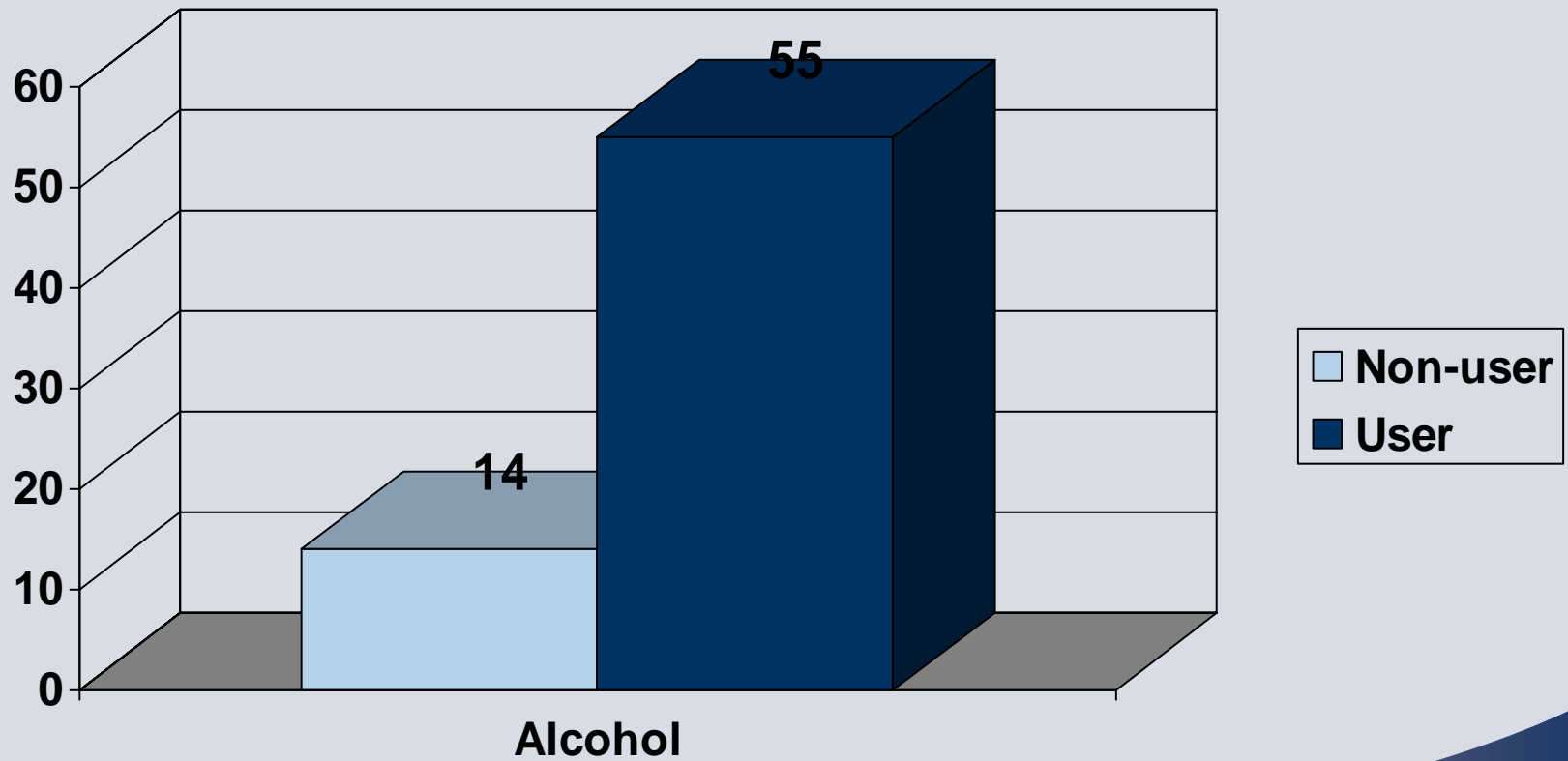


Blood Alcohol Concentration Levels of Sample of 568 Cases of Adolescents

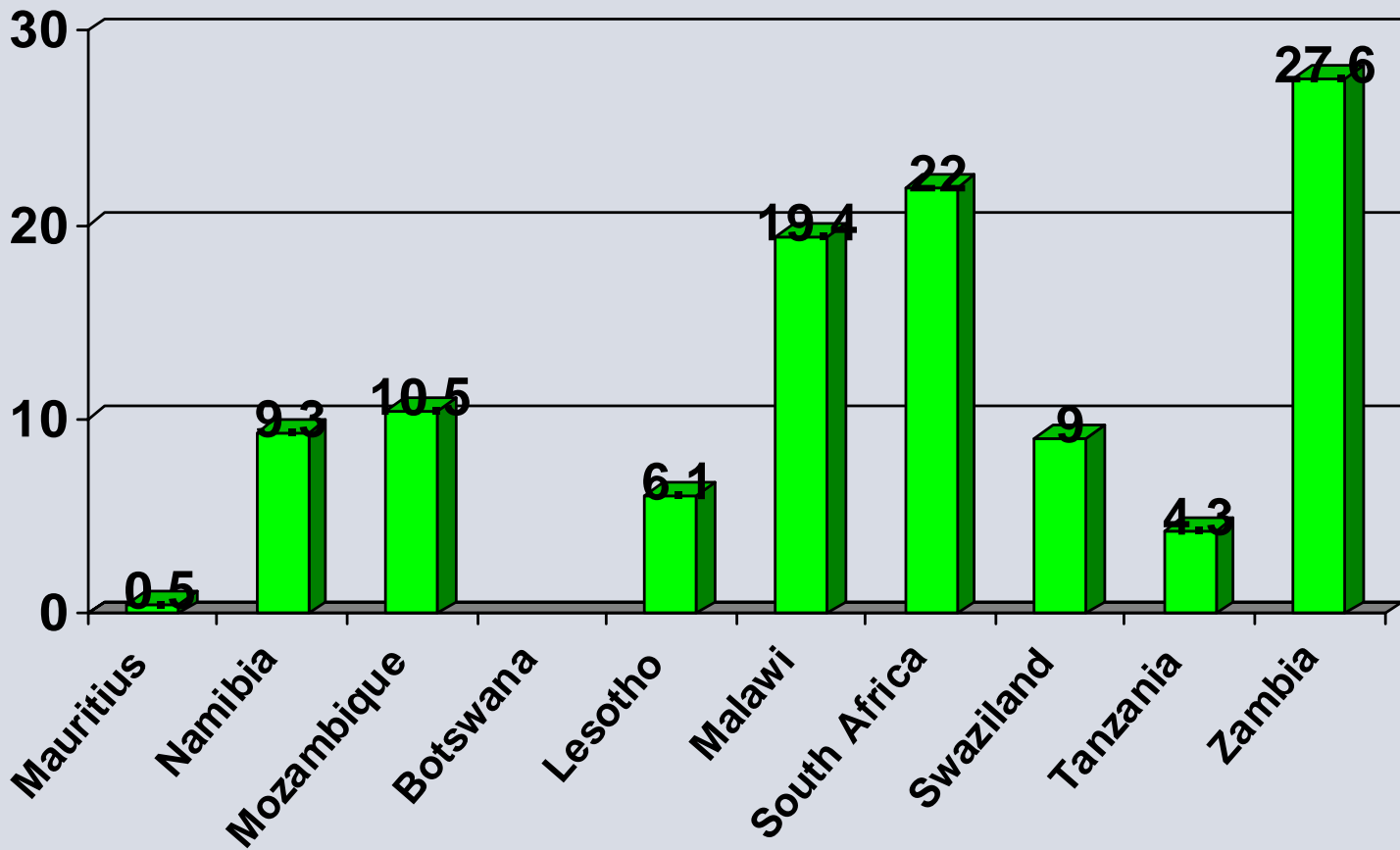




Percentages of Alcohol Users and Non-users with Sexual Experience (Durban; N = 633)



Percentage of the Population in Treatment under 20 Years of Age (9 SADC countries, 2004)





Risk Factors for Harmful Alcohol Use by Young People

- Societal/cultural – norms; advertising
- Community – access to alcoholic beverages
- Familial – exposure to parental alcohol use; parenting
- Schooling – academic aspirations/achievement
- Peer – peer selection/pressure
- Individual – use of other drugs



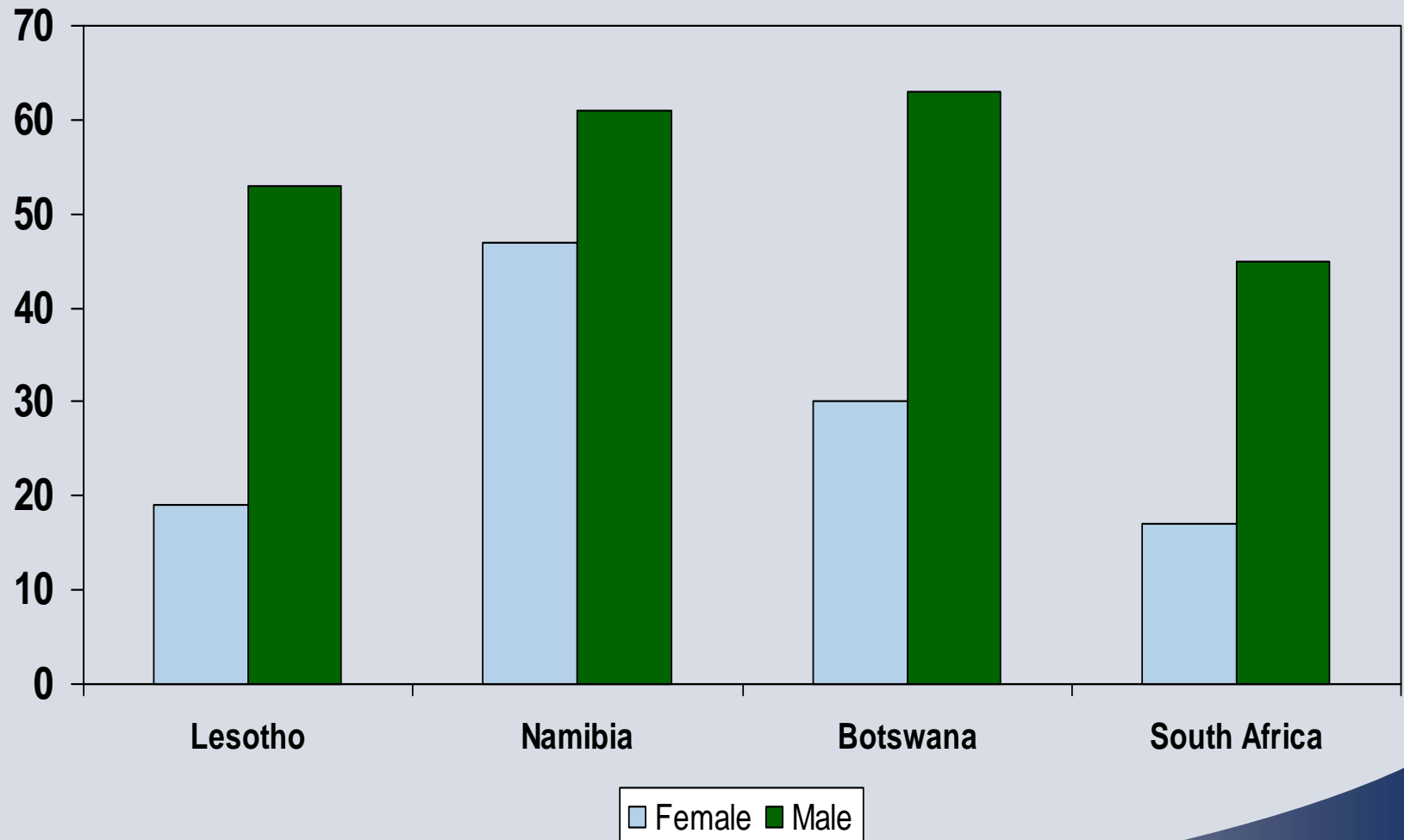
Alcohol Consumption among Women



Patterns of Alcohol Consumption among Women

- Fewer women than men consume alcohol
- Rates of use vary within the region
- Rates of use increasing among women (e.g. Namibia)
- Varied patterns of and reasons for use: social/positive reinforcement and stress-reduction

Rates of Past Year Alcohol Consumption Among Women and Men in Selected SADC Countries



Source: WHO (2004)

Rates of Alcohol Consumption Among Men and Women in the Sub-Saharan Region

Age (years)	Males	Females
15-29	10.4	3.1
30-44	14.3	4.7
45-59	12.9	5.1
60-69	11.3	3.2
70+	8.4	2.2

Source: Rehm et al. (2006)



High-Risk Drinking

- Although women are less likely to drink alcohol than men, men and women's rates of risky drinking (3 or more, or 5 or more drinks among males and females, respectively) among *drinkers* are not always significantly different:
 - 68% females versus 55% males were risky drinkers – Morojele et al. (2004)
 - Risky drinkers (weekdays): 6.9% men and 8.7% women – South Africa Demographic and Health Survey (1998)
 - Risky drinkers (weekends): 32.3% men and 32.0% women – South Africa Demographic and Health Survey (1998)



Contexts of Use and Types of Beverages

- Cider, beer, wine, homebrew
- Drink with friends, episodically (e.g. weekends only), and binge drink or drink at harmful levels
- Most women seldom drink in public places such as bars, shebeens, beer halls



Health and Social Consequences of Excessive Alcohol Use by Women

Principal among problems experienced by women are:

Health risks:

- Cancer
- Cardiovascular disease
- Liver cirrhosis
- Effects of pre-natal exposure
- Mental conditions

Social risks:

- Physical and sexual abuse
- Unintentional injuries
- Sexual risk behaviour



Alcohol Consumption During Pregnancy: Foetal Alcohol Spectrum Disorders (FASD)

- South Africa has the highest reported rate of FAS of 46 – 75 per 1000 births; compared with USA (0.05 – 2.0 per 1000 births (May et al. 2000; 2001; 2005).
- Risk factors for maternal drinking:
 - Limited knowledge
 - Lower socio-economic level
 - Exposure to dop-system
 - Rural residence and/or working on farms
 - Lower educational level
 - Heavy drinking by partner and/or family
 - Weekend binge drinking (beer) and duration of drinking “career”
 - Tobacco smoking
 - Social problem
 - Lower religiosity (Croxford & Viljoen, 1999; May et al, 2000)



Alcohol Consumption and Sexual Risk Behaviour

- Links between alcohol consumption and sexual risk behaviour leading to HIV have been observed
- Sexual risk behaviours are usually not associated with frequency of alcohol consumption, but with quantities consumed per sitting and problem use
- The characteristic pattern of episodic drinking to intoxication places women at greater risk of engaging in or being vulnerable to unprotected sex, other risky sexual behaviours, and infection with STIs and HIV.



Alcohol Consumption and Spouses/Partners

- Alcohol consumption plays a role in gender-based violence
- Studies in Botswana (Phorano et al., 2005), Namibia (Nangolo & Peltzer, 2005), and Mauritius (Bhowon & Munbauwal, 2004) address these links
- Although alcohol consumption is not the direct cause of the violent behaviour, studies suggest that it may be used as an excuse for the behaviour, or a means to gain courage to engage in the behaviour



Treatment

- There is an apparent under-representation of women being admitted to treatment
- The proportion of women in selected SADC treatment centres for alcohol-related problems - between January and June 2004 - ranged from 0% (Malawi) to 19% (South Africa) - SENDU (2005)
- Causes include lack of women-sensitive services, stigma, familial responsibilities (e.g. Mphi, 1994)



CONCLUSION

- Alcohol-related problems affect all sectors of society and are a major threat to development
- Relatively low proportions of the population drink
- Characteristic pattern of heavy episodic drinking is a major cause of acute problems
- Women and youth are increasingly being affected
- Need for prevention and treatment programmes
- Need for effective policies
- Urgent need for awareness raising about the threat of alcohol consumption to development in the sub-region.