

Excessive Alcohol Use

Presentation to the

Department of Health Liaison Committee of the New Mexico Medical Society

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Quote from Kenneth P. Moritsugu, MD, MPH, Interim Surgeon General (2007):

Alcohol is the most widely used substance of abuse among America's youth. A higher percentage of young people between the ages of 12 and 20 use alcohol than use tobacco or illicit drugs. The physical consequences of underage alcohol use range from medical problems to death by alcohol poisoning, and alcohol plays a significant role in risky sexual behavior, physical and sexual assaults, various types of injuries, and suicide.

Underage drinking also creates secondhand effects for others, drinkers and nondrinkers alike, including car crashes from drunk driving, that put every child at risk. Underage alcohol consumption is a major societal problem with enormous health and safety consequences and will demand the Nation's attention and committed efforts to solve.

The process of solving the public health problem of underage alcohol use begins with an examination of our own attitudes toward underage drinking and our recognition of the seriousness of its consequences for adolescents, their families, and society as a whole. Adolescent alcohol use is not an acceptable rite of passage but a serious threat to adolescent development and health, as the statistics related to adolescent impairment, injury, and death attest.

From *The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking*. (USDHHS 2007)¹

¹ *The Surgeon General's Call to Action* contains an extensive review of the literature on youth and adolescent alcohol initiation, use, and consequences. Information from this report is cited throughout this presentation.

Excessive Alcohol Use

Introduction and scope of the problem

Excessive alcohol is the third leading cause of death in the U.S. (after tobacco and diet/exercise) with at least 85,000 deaths/year. (Mokdad 2004) Rates of alcohol-attributable deaths in New Mexico are consistently greater than U.S. rates.

National Health Interview Survey:

- 61.4% adults over 18 (males and females) are current drinkers (USDHHS 2007).
- Of these drinkers, 7.9% are heavy drinkers.
- 42% adults drank 5 or more drinks in one sitting in past year.

Youth alcohol use:

Alcohol is by far the most widely used drug among youth. People aged 12-20 years drink almost 20% of all alcohol consumed in the U.S., and over 90% is consumed while binge drinking (5 or more drinks at one time).

United States

Survey data in 2006 reported from the National Center for Health Statistics:

- 45.3% of high school seniors drank alcohol in previous 1 month
- 25.4% seniors had binge drinking episode in previous 2 weeks
- 18-20 year olds have the highest prevalence of alcohol dependence of any age
- Nearly one third of youth begin drinking before age 13 years
- Approximately 10% of 9-to 10-year-olds have started drinking
- The peak years of alcohol initiation are during the 7th and 8th grades
- When they do drink, youth drink more heavily than adults.

New Mexico

Youth Risk and Resiliency Survey (NMDOH 2005)

- 35% of 9th graders and half of 11th and 12th graders reported drinking on one or more days in past 30 days
- Of those drinkers, 60% of 9th grade and 71% of 11th and 12th graders reported binge drinking in the previous month
- 30% started drinking at age 12 or younger (vs. U.S. 27.8%)
- No major differences in male/female or race/ethnicity group

Consequences of excessive alcohol use (with attributable fractions, where available):²³

Injury

- Motor vehicle crashes (40%)⁴
- Other injuries
- Assaults including domestic violence
- Homicide (47%)
- Suicide (23%)

Chronic disease and impairment

- Fetal alcohol spectrum disorders (100%)
- Acquired alcohol related neurodevelopmental effects (100%)
- Impact of adverse childhood events (ACEs) (Felitti 1998)
- Chronic liver disease – cirrhosis and hepatocellular cancer (40%)⁵
- Various other cancers, hypertension, pancreatitis, gastritis

Infectious diseases

- STDs and HIV

Other health risk behaviors

- Teen pregnancy
- Marijuana use
- Other illicit drug use

Social impact

- School failure
- Work productivity losses
- Crime
- Health care costs
- Others placed at risk

Alcohol contributes to “disparity ratio,” a measure used by the New Mexico Department of Health in its *Racial and Ethnic Health Disparities Report Card*. (NMDOH 2007)

Primary prevention

Primary prevention of excessive alcohol use requires understanding of the antecedent causes or determinants (including protective factors) and their relationship with each other. These are unquestionably multifactorial and not well characterized in terms of attributable fractions. At the individual level, genetic factors define part of the risk.

² Reported rates of chronic and heavy drinking in NM from Behavioral Risk Factor Survey are slightly lower than in U.S. The discrepancy between this and the markedly excessive alcohol related deaths in N.M. has not been determined.

³ CDC calculated determination of alcohol-attributable fractions for many acute and chronic conditions and alcohol attributable deaths are available in Solberg 2008.

⁴ Alcohol related motor vehicle crash deaths in NM have come down by 50% from 1982 to 2004, with improvement in NM’s ranking among the states, but still remain high.

⁵ While deaths from chronic liver disease (CLD) have been declining nationally over past 25 years, they have been rising over the same period in NM. Alcohol accounts for 60% of deaths from CLD in NM, vs. 50% nationally. (Roeber 2007)

There are family and peer factors and group and community factors, cultural and religious factors, and influential role models. In the social environment, factors include advertisements and promotions, alcohol distribution and access, price, the cultural media, legal sanctions and levels of enforcement, and industry lobbying and financing of the political process.

The young age of onset of drinking behavior is remarkable. The persistence of usage behaviors attests to the strength and sustainability of the causal web.

Addressing the problem

The Surgeon General's *Call to Action To Prevent and Reduce Underage Drinking* (DHHS 2007) provides a detailed literature review on alcohol use in children and adolescents from a developmental and the examines the consequences with particular reference to possible long-term neurocognitive impairment.

The *Call to Action* sets goals and an agenda for action that would engage multiple sectors: family, community, schools, colleges and universities, criminal and juvenile justice systems, law enforcement, governmental policy, and the health care system. It calls for continued public health surveillance of alcohol use and alcohol-related outcomes. It calls for continued research into the determinants of alcohol initiation and use and on the effectiveness of intervention strategies.

Brief intervention in primary care and other clinical settings:⁶

Brief intervention in clinical settings may be viewed as a component of a public health approach to reduce risky and harmful alcohol consumption.

A *Cochrane Database* review of 21 good quality, randomized controlled intervention trials with follow-up of a year or more showed sustained reductions in alcohol consumption. (Kraner 2007) Benefits included a shift downward (i.e., away from harmful to risky), reduction in binge drinking episodes and reductions in hospital days and mortality. Benefits are more evident in males than females. Interventions sustained beyond 1-4 sessions added little benefit.

The U.S. Preventive Services Task Force, reviewing the evidence through February 2003, recommended screening and counseling at a B level, with brief interventions in primary care settings in order to reduce alcohol use in adults. (USPSTF 2004)

Screening instruments: AUDIT, CRAFFT, CAGE and others.

Motivational interviewing has been successfully applied in brief intervention contributed to this approach. (Miller and Rollnick 2002)

⁶ Report distributions of alcohol use in adults primary care settings (from USPSTF 2004):

4%-29% risky

0.3%-10% harmful

2%-9% exhibit dependence

With respect to preventing or reducing alcohol misuse by adolescents the USPSTF concluded that the evidence is insufficient to recommend for or against screening and behavioral counseling interventions in primary care settings to prevent or reduce alcohol misuse. (USPSTF 2004)

In spite of the consistent evidence supporting brief intervention, the uptake of screening and brief intervention in the U.S. has been slow. (Kuehn 2008) The reasons are not clear, but may be tied to the U.S. orientation to care for acute conditions over behavioral conditions and over management of chronic conditions. New AMA billing codes may be helpful.

Calculating clinical preventable burden of disease as measured by mortality and morbidity (measured as quality-adjusted life years or QALYs), alcohol screening and counseling are one of the highest-ranking preventive services that have been analyzed and deserve specific attention promoting their adoption. (Solberg 2008)

Health care barriers to moving forward:

- Medical provider motivation
- Insurance coverage: limits in covered benefits, cost-share
- Interruption/turnover of coverage (e.g., falling out of Medicaid enrollment)
- Inadequate availability of providers and facilities
- Primary care settings being inconstantly accessed by youth.
- Cost

Cultural barriers:

- Lax attitudes about risk and alcohol use
- Media promotion
- Pervasive pop culture
- Availability of alcoholic beverages
- Alcohol industry's resistance to curbs

Population level strategies

- Control density of outlets and points of distribution, e.g., from zoning and
- Licensing and enhanced enforcement of laws prohibiting the sale of alcohol to minors. (CDC 2008)

- Alcohol tax (impacts chronic/heavy drinkers). NM beer and liquor excise taxes are already at upper quintile nationally.

Note: introduction of the following evidence-based interventions to reduce alcohol-related motor vehicle crashes and deaths in N.M. has shown considerable success over the past decade:

- Reduced blood alcohol concentration
- Sobriety checkpoints

- Intervention training programs for servers
- Mass media campaigns

The evidence based on evaluations of promising interventions such as school-based instructional programs, peer organizations, and social norming campaigns remains weak with respect to consistent and significant outcomes, for example, on amount of drunk driving

New Mexico agency involvement crosses several state agencies. Of singular prominence have been the efforts to consolidate and organize behavioral health services, notably through the Interagency Behavioral Health Purchasing Collaborative. This has constituted a major effort to address treatment services, including alcohol use disorders. Major issues persist in achieving adequate numbers and distribution of personnel and facilities and the financing. Primary prevention, by comparison, remains largely invisible as a public health strategy.

Nevertheless and specifically for alcohol, the State has had a succession of planning efforts, including the five-year Strategic Prevention Framework State Incentive Grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) starting in 2004. In addition, the State has had a SAMSA State Incentive Grant SAMHSA awarded in 2003 for implementing evidence-based substance abuse preventions programs directed at reducing risks and promoting resiliency and school preparedness. Participants are children ages 0 to 6, in programs targeting families in communities that successfully compete for six \$100,000 awards. It would be of interest to learn the outcomes of these and any other efforts.

Other than its being embedded within the broad priority of behavioral health, alcohol is neither addressed per se in the State of New Mexico Comprehensive Strategic Health Plan (2006) nor apparent in currently circulated drafts for the 2008 Plan.

Arguably, the relative lack of attention to alcohol, disproportionate to its magnitude as a premier public health issue, promotes the continued cultural acceptance of excessive alcohol use.

The Department of Health should be acknowledged for its tracking and monitoring alcohol usage and alcohol-related morbidity and mortality.

In addition, the Center on Alcohol, Substance Abuse, and Addictions (CASAA) at the University of New Mexico has been a major resource for national, international, and regional research on alcoholism and its treatment.

Recommendations:

1. The Clinical Prevention Initiative, a collaboration between the New Mexico Medical Society and the New Mexico Department of Health, freshly consider

whether it is now appropriate to add brief intervention to its list of initiatives targeting clinical providers.

2. The New Mexico Department of Health and New Mexico Health Policy Commission add excessive alcohol usage to the list of items that merit prioritization and assign strategies and accountability for effective primary prevention and for increasing use of effective intervention modalities.

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