

**Drunk Driving Awareness Programs: Ideal Components Needed in Drunk Driving
Awareness Programs**

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Abstract

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Sabrina Lynn Kreyer

Under the Supervision of Dr. Sabina Burton

Each year in America thousands of people are killed and several others are seriously injured because of a drunk driver. Drunk driving is a serious problem and current measures to curtail the problem are not effective enough. This paper discusses the prevalence of drunk driving, specifically looking at the incidences involving accidents resulting in injury and/or death. The specific characteristics of the offenders and the current measures used to help reduce the number of drunk drivers on the road will be discussed. Community awareness programs such as *You Drink and Drive, You Lose* at the national level and *MOST of Us Prevent Drinking and Driving* at the state level are discussed. These programs demonstrate what is needed in an effective community awareness program.

This paper will demonstrate that an effective drunk driving control system must influence the entire range of drunk drivers from those who rarely drive drunk or are highly unlikely to drive drunk through to repeat offenders and those that have merely avoided arrest or penalty. Most importantly the research in this paper will demonstrate there must be an emphasis placed on expanding the public's awareness on the physical aspects of drinking and the risks of driving drunk. Effective drunk driving community awareness programs are needed to remind the public of the dangers, risks, and cost of drinking and driving.

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SECTION I. INTRODUCTION-DISCUSSION OF THE PROBLEM

The Role of Alcohol in American Culture/Society

Alcohol has been a fundamental part of the human culture since the beginning of civilization and it continues to be a fundamental part of many customs and traditions in the American culture. The American society has an ambivalent relationship with alcohol. On the one hand people may get together and talk over their favorite wine or beer, they may tell and re-tell funny stories that came from a “night out on the town,” while on the other hand, there are several more horror stories to be told. Those are the stories of alcohol abuse, alcohol dependence, alcohol related accidents, injuries and deaths. McDowell and Spitz (1999) state that 90 percent of Americans drink alcohol at some time during their life. They further state that among the adult population, 60-70 percent will drink at any given time. McDowell and Spitz (1999) define a drinker as anyone who has consumed alcohol during the past month. Within the population of drinkers 40 percent will have or has had a temporary problem with alcohol. 20 percent of the men and 10 percent of the women will end up with alcohol abuse, and 10 percent of men and 5 percent of women will end up physiologically dependent upon alcohol (McDowell and Spitz, 1999).

Alcohol is everywhere in American society. Alcohol is viewed differently from other psychoactive drugs which are used in western civilization. Rarely is an offering for an alcoholic beverage prevented, it is usually welcomed everywhere. While there have been attempts to control its use and to eliminate its availability those most often have failed. Alcohol is used at family events and celebrations. Consider all the American sporting events where alcohol is served. In the employment arena companies often host parties where alcohol is served and toasts

are made for great accomplishments. The television is flooded with alcohol advertisements and commercials showing people having a good time when and where there is alcohol present.

Unfortunately there are not as many advertisements and commercials showing the bad times and problems alcohol can cause. Alcohol is a drug that affects a large number of people. Alcohol often has devastating effects on people and currently there are said to be more than 12 million alcoholics in the United States (Fields, 1998). Within the United States attitudes towards alcohol have a unique history. According to McDowell and Spritz (1999) the idea of alcoholism and addictive behavior being a progressive disease is approximately only two hundred years old.

In 1851 Maine was the first state to pass a law on prohibition. Another 13 states passed statewide prohibition laws between 1851 and 1855. However, by 1868, 9 of those 13 states had repealed them. In 1874 the National Prohibition Party was organized and thus the second wave of prohibition took place between 1880 and 1889. During this time 7 states adopted prohibition laws and as in the past by 1896, 4 had repealed them. States were discovering that the ultimate goal of prohibition was not being met. Prohibition was meant to help reduce crime and corruption, improve health, solve social problems, and reduce the tax burden created by prisons and halfway houses. It was not successful in doing this and states were repealing their prohibition laws. Between 1907 and 1919, 34 states enacted legislation enforcing statewide prohibition and only 2 states repealed their prohibition laws. National prohibition came into effect January 16, 1920. Prohibition made it illegal to sell or transport intoxicating liquors within or into the United States. As with any law there were those who were violating it. Organized crime around the sale, use and distribution of alcohol became quite popular. People were afraid of the growing underground market concerning the sale of alcohol and the organized crime and corruption surrounding it and because of this many people wanted prohibition laws

repealed. On February 20, 1933 prohibition ended with the passing of the Twenty-first Amendment. Control of alcohol was returned to the state level (Ray and Ksir, 1990).

At the state level the decided legal age to consume, possess or purchase alcohol was set at 21. MADD (Mothers Against Drunk Driving, 2010) state that the age limit was set at 21 because of research showing how young people react to alcohol. Studies found that teens got drunk twice as fast as adults and had more trouble knowing when to stop drinking. Because of their younger age teens were more likely to overdo it and binge more than adults. According to the National Institute on Alcohol Abuse and Alcoholism (2010), there are an estimated 10.8 million underage drinkers in the United States making underage drinking a widespread and dangerous problem. The National Institute on Alcohol Abuse and Alcoholism (2010) states, “Forty-five percent of 12th graders; 34 percent of 10th graders; and 17 percent of 8th graders reported using alcohol in the past month – more than cigarettes and marijuana combined” (paragraph 1). Many underage drinkers engage in dangerous patterns of drinking including binge drinking. In this study done by the National Institute on Alcohol Abuse and Alcoholism (2010) binge drinking was defined as having 5 or more drinks on a single occasion. Underage drinkers were found to drink less frequently than adults but drank more per occasion. “Twenty-nine percent of 12th graders, 22 percent of 10th graders, and 11 percent of 8th graders have engaged in binge drinking” (National Institute on Alcohol Abuse and Alcoholism, 2010, paragraph 1). Among young people in the United States injury is the leading cause of death and alcohol is the leading contributor to injury deaths. “In the U.S., an estimated 5,000 individuals under age 21 die each year from injuries caused by underage drinking. These include: Motor Vehicle Crashes: About 1, 900 deaths, Homicides: About 1, 600 deaths, Suicides: About 300 deaths” (National Institute on Alcohol Abuse and Alcoholism, 2010, paragraph 2).

Drunk Driving and the Problems of Highway Safety

Owning and operating a vehicle is considered a necessity for participation in today's social and economic society by most. Compared to other societies that have mass transit or public transit systems America can be said to be a nation on wheels. Along with being a means of transportation vehicles are also viewed in our society as status symbols (Jacobs, 1989). Americans have a love affair with not only vehicles but with alcohol and when the two are combined the results are often deadly. According to the National Highway Traffic Safety Administration (1999) when drinking drivers get behind the wheel the severity of a motor vehicle crash increases and impaired drivers are more likely to drive reckless and become involved in fatal crashes.

Drunk drivers and drivers impaired by drugs continue to cause trouble on America's roads and highways. It is estimated that more than 17,000 Americans die each year as a result of an alcohol-related traffic crash. In 2003, 17,013 people were killed in an alcohol-related crash (Whitmore, 2010). The National Survey on Drug Use and Health (2005) reports, "In 2002 and 2003, 16.6 percent of adult drivers aged 21 or older (an estimated 30.7 million persons) reported that they had driven while under the influence of alcohol or illicit drugs during the past year" (paragraph 4). Daugherty and O'Bryan (2004) state unlike health problems which often develop over time, impairment problems can happen in just one day or even in just one episode of making high-risk alcohol or drug choices. When enough alcohol or drugs have been consumed so that our brains slow down and the normal ability to think and react effectively has been altered one is then said to be impaired. Changes in our mental or physical functioning which increase our risk for a problem is impairment (Daugherty & O'Bryan, 2004). Drunk driving is a

type of irresponsible behavior which causes staggering amounts in property and human losses. Because of this drunk driving is a major social problem in need of serious attention.

Common Characteristics of Offenders

About every thirty minutes someone dies as a result of an alcohol related traffic crash and about every two minutes someone is hurt because of an alcohol related crash. Surprisingly three out of every ten Americans faces the possibility of being directly involved in and alcohol related crash. 41 percent of traffic collisions are alcohol related and about 600,000 Americans are injured each year in alcohol related accidents (Whitmore, 2010).

According to The National Survey on Drug Use and Health (2005), “In 2002 and 2003, male drivers aged 21 or older (22.0 percent) were nearly twice as likely as their female counterparts (11.4 percent) to have driven under the influence of alcohol or drugs during the past year” (paragraph 5). Younger drivers are more apt to drive while under the influence compared to older adult drivers. 33.8 percent of drivers between the ages of 21-25 reported driving while under the influence within the past year while drivers between the ages of 50-64 reported in with only 10.0 percent of them driving while under the influence (National Survey on Drug Use and Health, 2005). When one looks at the racial/ethnic groups American Indians/Alaska Natives and non-Hispanic whites were more likely to have driven while under the influence than members of other racial/ethnic groups (National Survey on Drug Use and Health, 2005).

Role of Public Awareness on the Issue of Drunk Driving

As long as there have been vehicles and as long as there has been alcohol there have been drunk drivers on the road. In 1843 the New York Central Railroad prohibited its employees to drink while on duty and in 1910 New York State added drunk driving as an offense to its traffic code (Jacobs, 1989). A major movement against drunk driving took place in 1966 with the

passing of the Highway Safety Act. The National Highway Safety Bureau now known as the National Highway Traffic Safety Administration was founded in 1970 and thus federal resources have been used to pay close attention to drunk driving. In 1968 the report *Alcohol and Highway Safety* was published. The report warned that drunk drivers are a main contributor to the death of innocent humans and because our society is so mechanically inclined questions and solutions must be explored in great length so that effective countermeasures may be taken against this larger problem of drunk driving (Jacobs, 1989). So even years ago drunk driving was at the forefront as a social concern.

Anti-drunk driving movements began to pop up across the United States during the late 1970s and early 1980s. Remove Intoxicated Drivers (RID) was founded by Doris Aiken in Schenectady, New York in 1979. This came about after a local teenager was killed by a drunk driver. In Sacramento, California Mothers Against Drunk Driving (MADD) was founded in 1980 by Candy Lightner after her daughter was killed by a drunk driver who had a history of driving drunk. Anti-drunk driving groups brought drunk driving to the top of the social problems agenda during the early 1980s. Because of this drunk driving soon gained recognition at the federal level when Congress made a Drunk and Drugged Driving Awareness week each December. Two laws were enacted making federal highway funds available to states that made drunk driving with a blood alcohol concentration (BAC) over 0.10 a criminal offense and those that raised the minimum drinking age to twenty-one (Jacobs, 1989).

SECTION II. LITERATURE REVIEW

The literature review is divided into four sections. The first section will define the crime of drunk driving. The second section will discuss current statistics of drunk driving offenses. The third section will be a review of existing public awareness programs specifically looking at the You Drink and Drive You Lose program at the national level and at state level Montana's MOST program will be discussed. The fourth section in the literature review will discuss the effectiveness of public awareness programs.

Defining the Crime of Drunk Driving

All states have laws against drunk driving. States may vary from having .08 BAC or .10 BAC laws. BAC (blood alcohol content/concentration) is measured by dividing grams of alcohol by 100 milliliters of blood. Most states have a legal limit of .08 BAC. This means that for every 100 mL of blood there is 8 grams of alcohol in the blood stream. There has been a trend over the years among states lowering the BAC from .10 to .08. This trend is because states that use the .08 BAC to define intoxication are eligible for more federal assistance than those using the .10 BAC (U.S. Legal, 2010). At .08 BAC or .10 BAC one is said to be legally impaired or drunk. Several other physical and mental signs will appear when a person is intoxicated. People will exhibit different signs and symptoms at different blood alcohol levels. Generally it becomes readily apparent when someone reaches the point of intoxication. People who drink often and more heavily build up a tolerance to alcohol and it takes longer for them to feel the effects but they will eventually exhibit the same signs of intoxication only their BAC will be much higher than someone who does not drink as heavy or as often (bloodalcoholcontent.org, 2010). When someone initially begins drinking alcohol they may feel

more relaxed and at ease. Their ability to think clearly and their motor performance skills are slowed but only slightly at first. With higher doses or consumption of alcohol both the cognitive and motor skill are greatly affected and judgment is also impaired. When someone is impaired they may have slow-slurred and mumbled speech, lack coordination and have unsteady movements and uncertain balance. Nystagmus, which is the uncontrolled movement of the pupils will also become present when someone is impaired (McDowell and Spitz, 1999).

Someone is impaired when they have had enough alcohol or drugs that their brain is impaired and does not think or react effectively. For some people this can occur before they reach a BAC of .08 or .10. Those with a high tolerance for alcohol can drink more alcohol or use more drugs before they become impaired. As an individual's BAC level increases their level of impairment will also rise (The National Highway Traffic Safety Administration, 1999). There are many factors which will affect what ones BAC will be when they drink. A few of these factors include: body size, rate of absorption, strength or percentage of alcohol in the beverage, nervous or emotional state of the drinker, altitude, high or low blood sugar levels and individual differences in body chemistry and drinking history (Royce and Scratchley, 1996).

Drunk driving laws are state-specific and so are the penalties imposed on those charged with the offense of drunk driving or driving while impaired. Some states use the term DUI (driving under the influence) or DWI (driving while impaired) while others use OWI (operating while intoxicated) essentially these are all the same thing meaning someone is under the influence of alcohol or drugs and is driving or operating a motor vehicle. If a police officer has reasonable grounds to believe your driving ability was affected by drugs or alcohol or if you are driving with a prohibited alcohol or drug concentration you can be charged with driving while impaired (Drunk Driving Laws.org, 2009). The two elements which need to be proved for the

crime of drunk driving are that someone was operating/driving a motor vehicle and that they were under the influence or impaired by alcohol or drugs while doing so.

Drunk Driving Statistics

“In America each year 16,189 people are killed and another 327,00 are seriously injured simply because someone decided to operate their vehicle under the influence of alcohol” (Ortman, 2000, paragraph 1). Automobiles are generally safe to operate but when one combines alcohol and the task of driving the results can be dangerous and often deadly. According to the Centers for Disease Control and Prevention (2010), 32 people will die each day in the United States because of an alcohol impaired driver that has a crash. Drunk drivers are 13 times more likely than sober drivers to cause a fatal crash. Most of these crashes will happen between the hours of 1 a.m. and 3 a.m. when it is estimated that 25 percent of drivers on the road have been drinking. During these early morning hours nearly 60 percent of all fatal crashes involve a drunk driver. The majority of accidents involve the driver themselves being injured or killed or passengers in the same vehicle as the drunk driver. Between the hours of 8 p.m. and 5 a.m. approximately 60 percent of drivers that were involved in a fatal crash had been drinking. During 5 a.m. and 8 p.m. less that 20 percent of the drivers had been drinking. (Levitt and Porter, 2001). NHTSA’s National Center for Statistics and Analysis (2008) states, “In 2007, about 67 percent [56.0+10.5] of the alcohol-impaired driving fatalities were drivers or motorcycle riders with BACs=.08+ and about 17 percent [15.9+0.6] were passengers riding with the alcohol-impaired drivers/motorcycle riders” (page 2).

Alcohol is the leading contributor to injury deaths amongst young people in the United States. Each year about 5,000 people under age 21 die because of an injury caused by underage drinking. About 1,900 die in motor vehicle crashes while 1,600 deaths are the result of homicide

and the remaining are the result of suicide (National Institute on Alcohol Abuse and Alcoholism, 2010). Males make up the majority of drunk drivers that are involved in fatal crashes. In 2007 males accounted for 83 percent of drunk driving fatalities. Drivers between the ages of 25-34 made up 26 percent of the alcohol impaired drivers involved in fatal crashes. Most drunk driving fatalities occur during the weekend and late in the evening or early morning hours. During 2007 41 percent of all drivers that were involved in any fatal crash were said to be involved in one that occurred on the weekend. Also during 2007, about 57 percent of all drunk drivers that were involved in a fatal crash were involved in a crash that occurred on the weekend (NHTSA's National Center for Statistics and Analysis, 2008). According to the National Highway Traffic Safety Administration (1999), fatally injured drivers were more likely to have prior convictions for driving drunk and they were less likely to be wearing their seatbelts at the time of the crash. Frequent heavy drinkers or those who are alcohol dependent make up about three quarters of drivers that are convicted of drunk driving (Whitmore, 2010).

Review of Existing Public Awareness Programs-Case Studies

You Drink and Drive, You Lose (National Level)

The National Highway Traffic Safety Administration was given a challenge in 1994 to reduce the incidences of drunk driving related fatalities and to prioritize the issue of drunk driving in the nation's agenda. A campaign was started known as *You Drink and Drive, You Lose*. Both the public and private sectors were asked to offer their insight as to how to reduce drunk driving accidents and fatalities. Partnerships were formed and a variety of programs, recommendations and materials were developed all with one goal in mind: to reduce drunk driving and drunk driving fatalities. The campaign *You Drink and Drive, You Lose* includes partnerships with the National Association of Governors Highway Safety Representatives,

Operation C.A.R.E. (Combined Accident Reduction Effort), the International Association of Chiefs of Police, the National Sheriffs Association and the National Organization of Black Law Enforcement Executives. Basically the campaign features nationwide enforcement periods where the aim is to pick out and pick up drunk drivers (National Highway Traffic Safety Administration, 1999).

In early December 1999 the National Highway Traffic Safety Administration began the *You Drink and Drive, You Lose* campaign. The goal was to lower the number of deaths caused by drunk driving to no more than 11,000 by the year 2005. The message of the campaign was simple and clear: to make the right choice and don't drink and drive. According to the National Highway Traffic Safety Administration (1999), the number one goal of this campaign was to bring to light the senseless killing that was taking place on America's roadways because of drunk drivers. In addition this campaign addressed the urgency of a need to bring this problem to the attention of everyone in the nation and to hold everyone accountable. *You Drink and Drive, You Lose* is not just a public service advertising campaign delivering the lifesaving message that drunk driving is dangerous and can be deadly it provides the necessary framework for a comprehensive impaired driving prevention program for its partners. The partners that make up the membership are provided with guidance and given the best practices to implement programs which go beyond the traditional efforts used to combat drunk driving (National Highway Traffic Safety Administration, 1999).

You Drink and Drive, You Lose is based on activity in four areas: 1) conducting public education; 2) building public-private partnerships; 3) enacting strong legislation; and 4) staging highly visible enforcement. The primary focus of the campaign speaks directly to the three high-risk populations which were identified as most likely to drive after they have been drinking.

This population consists of 21 to 34 year-olds, underage drinkers, and repeat offenders or those with high blood alcohol levels. According to the National Highway Traffic Safety Administration (1999), the most effective solution to combating drunk driving was to have highly visible law enforcement on patrol coupled with the public's help and awareness about the dangers of drunk driving. It is believed that by taking a comprehensive community approach the problem of drunk driving can be stopped before it starts. *You Drink and Drive, You Lose* firmly believes in order to meet their primary goal community involvement is a must. Community safety advocates are a part of the program. Community safety advocates help communities by: partnering with the media to raise awareness about the deadly consequences of impaired driving; building and expanding partnerships among local and state organizations; creating community support for law enforcement efforts; and enforcing existing laws through active enforcement programs (National Highway Traffic Safety Administration, 1999).

Mobilization kits are available for law enforcement agencies wishing to participate in this program. A nation-wide wave of mobilization takes places on certain dates. For example in 1999 the first nationwide impaired driving prevention mobilization took place from December 17th through December 19th. Another mobilization was scheduled for the July 4th, 2000 weekend. This mobilization effort included highly visible law enforcement, saturation patrols and sobriety checkpoints. Small rural towns as well as large cities took part in the effort to prevent drunk driving (National Highway Traffic Safety Administration, 1999).

The National Highway Traffic Safety Administration developed a model comprehensive impaired driving program for use by states and communities wanting to implement *You Drink and Drive, You Lose*. They identify six key elements in the program:

- 1) Prevention and Public Education
- 2) Enforcement

- 3) Prosecution, Adjudication, and Treatment
- 4) Legislation
- 5) Partnerships and Outreach
- 6) Program Support

Prevention and public education include campaigns focusing on promoting safety and healthy lifestyles. These programs are most often carried out in schools, colleges, employment sites and in medical centers. Topics in these campaigns include the effects of alcohol and other drugs, limiting alcohol and drug availability, and preventing those who are drunk from driving. In order for the prevention programs to be effective they should alter social norms and change risky or dangerous behaviors while creating protective environments (National Highway Traffic Safety Administration, 1999).

When one looks at the entire process of detecting a drunk driver, investigating and arresting a drunk driver, processing the drunk driver ending with an arrest and a successful conviction a comprehensive enforcement program is a must. By having a comprehensive enforcement program the process is likely to go much more smoothly and be more successful than other enforcement methods (National Highway Traffic Safety Administration, 1999). In order for this program to be successful police officers and departments participating in these enforcement efforts should have adequate training and equipment. Police departments should use their resources effectively and make the community aware of their activities. The National Highway Traffic Safety Administration encourages police departments and other law enforcement agencies to publicize the results of their enforcement activities (National Highway Traffic Safety Administration, 1999).

Making sure the prosecutors are able to support the efforts of law enforcement and prosecute drunk driving cases properly is also a key component in this program. It is recommended that drunk driving cases are given high priority and that there should be uniform

and consistent prosecution of these cases while still allowing room for individualized sanctions. Prosecutors should be involved in public education and prevention activities when able. Judges can be involved by making sure there are uniform and consistent adjudication of drunk driving cases. Judges should be adequately trained and educated to assure they have the appropriate skills and knowledge needed to decide these cases. Judges should be involved in public education and prevention activities when able. The National Highway Traffic Safety Administration also promotes treatment as a component to combating the problem of drunk driving. Treatment would include being diagnosed and screened for substance abuse problems. This would be conducted by well qualified and trained personnel prior to sentencing. The results would be used to decide whether or not a substance abuse treatment program should be part of the sanction imposed. If a substance abuse treatment program is recommended it should be completed before an offender is allowed the privilege of driving again so as to ensure it gets completed (National Highway Traffic Safety Administration, 1999).

Legislation plays a key role in any drunk driving program. “States and communities are encouraged to enact laws that define and prohibit impaired driving in broad and readily enforceable terms, facilitate the acquisition of evidence against impaired drivers and permit a broad range of administrative and judicial penalties and actions” (National Highway Traffic Safety Administration, 1999, paragraph 30). Key points on the legislative side are to make sure impaired driving laws define the offense, provide for effective enforcement and that there are effective penalties for violations of these laws (National Highway Traffic Safety Administration, 1999).

Making sure adequate partnerships are formed at the local, state and national levels will help to increase the strength of this program. Local, state and national citizen advocacy groups

were said to account for a dramatic decline in the number of alcohol-related fatalities over the past 20 years proving once these groups are formed and mobilized they can have a great impact (National Highway Traffic Safety Administration, 1999). Advocacy groups have a number of state and local chapters across the county and are said to be extraordinarily successful in improving state laws. These advocacy groups strive to raise public awareness about the dangers of drinking and driving and focus on supporting effective enforcement and adjudication efforts. Involving advocacy groups, schools and employers are just a few ways to get the message out about drunk driving. Making sure people hosting parties and other establishments which serve or sell alcohol are educated on responsible alcohol service will help eliminate those under the legal age being served or those that are too intoxicated from being served (National Highway Traffic Safety Administration, 1999).

Managing any program implemented to combat drunk driving is essential to determine that the efforts of the program are effective. Procedures should be in place to make sure program activities are implemented as intended. Data collection methods and records systems should be set up in advance and should be supportive of the efforts of those involved. The programs should be evaluated on a regular basis to gauge effectiveness (National Highway Traffic Safety Administration, 1999).

Progress has been made according to the National Highway Traffic Safety Administration and the number of fatalities in the last decade dropped from 24,050 in 1986 to 15,935 in 1998. The 33 percent drop is said to be attributed to four things: 1) stronger laws; 2) tougher enforcement and adjudication; 3) more effective public education; and 4) the changing attitudes toward drinking and driving (National Highway Traffic Safety Administration, 1999).

Montana's MOST Program (State Level)

While advances in traffic safety have been made over the past two decades and engineering of automobiles continues to improve to help make our highways safer it is ultimately the driver who controls the vehicle. In other words a vehicle is only as safe as the person who drives it. In Montana the rates of impaired driving can be considered quite disturbing. In 2002, Montana ranked first in the nation for alcohol-related fatalities and alcohol and/or drug related crashes were said to account for approximately 10 percent of all vehicle crashes in the state. In 1999, the state ranked fourth in the nation and had been on a steady incline over the past five years leading it to be first in the nation in 2002. Young adults between the ages of 21 and 39 account for nearly half of those involved in alcohol related crashes while 21 to 24 year-olds have the highest percentage of involvement. What is alarming is that 21 to 39 year-olds represent less than a third of the state's licensed drivers (Linkenbach and Perkins, 2005).

The Montana Department of Transportation (MDT) and the National Highway Traffic Safety Administration (NHTSA) decided it was time for an intervention and both funded a social norms approach which became known as *MOST of Us Prevent Drinking and Driving* campaign. This was the first ever attempt at applying the social norms theory to the problem of drunk driving. A 15-month media campaign was carried out in a 15-county intervention area on the western side of the state. Half of the state's 21 to 34 year-olds population were said to live within the intervention area. Twenty-six eastern counties served as the control environment. Prior to the media messages being delivered a baseline survey was done to collect self-report data on the target population's behavior with respect to drunk driving and data was also collected on their perceptions of the behavior of their peers. From this data normative messages and media was developed which would later air during the campaign.

The 15 intervention counties on the western side of the state were exposed to high doses of the social norms messages and then compared the resulting changes in perception, attitudes, and behaviors with those in the 26 eastern Montana counties that served as the control group. The western counties were exposed to massive campaign messages and they could be heard and seen on the television, radio, newspaper, billboard, and movie slide advertisements. Advertisements were also placed in local and college newspapers. The low-dosage 26 eastern counties received fewer airings of the campaign messages than the western counties. The normative messages were the same for both the high and low-dosage areas that *MOST Montana Young Adults (4 out of 5) Don't Drive and Drive*. Promotional items with the campaign message were distributed throughout the entire state during the 15 months. The objective of the study was to see if a high-intensity social norms intervention would be effective in reducing the prevalence of driving after drinking among 21 to 34 years-olds living in the western counties of Montana (Linkenbach and Perkins, 2005).

Prior to the campaign airing a survey found that 20.4 percent of Montana young adults reported having driven within one hour of consuming two or more drinks within the previous month, 92 percent of the respondents in the survey perceived that the majority of their peers had done this. The difference between the perception of the behavior of others and their actual doing is what the social norms theory addresses and thus tries to correct. Fear-based media efforts can compete with positive social norms messages and in turn solidify already exaggerated misperceptions about the prevalence of drunk driving. According to the social norms theory fear-based media efforts needed to be controlled for. Within the treatment counties fear-based media was restricted or eliminated all together. The western control counties were allowed to operate with these campaigns not being restricted. According to Linkenbach and Perkins (2005),

“Montana’s *MOST of Us Don’t Drink and Drive* campaign is based on social norms theory, which maintains that our individual behavior is strongly influenced by our perceptions of the attitudes and behaviors of our peers” (p. 6). This campaign focused on changing the erroneous beliefs and perceptions of what people believed other Montana natives were doing when it came to drunk driving. By changing ones beliefs and perceptions it was hoped it would have an impact on an individual’s actual behavior (Linkenbach and Perkins, 2005).

A baseline survey was done in 1998 and surveys were conducted at four other times: before the intervention began (Time 1, November 2001), during the media intervention (Time 2, November 2002), at the end of the intensive paid media campaign (Time 3, March 2003), and three months after the campaign had ended (Time 4, June 2003). Before, during and after the campaign both the treatment and control areas had representative samples that were asked an identical set of questions regarding their attitudes and behaviors about drunk driving. These same people were also asked questions regarding their perceptions of their peers attitudes and behaviors about drunk driving. The survey also gathered information about the respondents’ exposure to the campaign message and whether they recalled seeing the campaign or not. Data collection was done over the phone by trained personnel. The data was then analyzed and it was found that the high-intensity social norms campaign improved the accuracy of the target audience’s perceived norms. The social norms campaign also increased peoples healthy, preventative attitudes and reported behaviors when it came to drunk driving. When this data was compared to that of the control counties the results were found to be statistically significant. The data from the surveys found:

- a 24.8-percent relative **increase** in recall of campaign messages about the majority norms regarding not driving while impaired;
- a 7.5-percent relative **decrease** in the percentage that believed the average Montanan their age drove after drinking during the previous month;

- an 11.0-percent relative *increase* in the percentage that accurately perceived the majority of their peers use a non-drinking designated driver;
- a 13.7-percent relative *decrease* in the percentage that reported personally driving after drinking;
- a 15.0-percent relative *increase* in the percentage that reported always using non-drinking designated drivers;
- a 16.5-percent relative *increase* in the percentage who would support passing a law to decrease the BAC legal limit for driving to 0.08 from 0.10 (Linkenbach and Perkins, 2005, p. 4).

The campaign achieved its main goal in getting young adults in the western intervention counties to see the normative environment more accurately than the young adults in the control counties. Misperceptions were corrected about the pervasiveness of driving after drinking which led to changes within their own behavior and attitudes about drunk driving. The program was deemed to be successful on a statewide scale and a high-intensity paid media social norms intervention was found to be effective on a variety of measures which included changing ones perceptions, behaviors, attitudes and getting one to support a change in policy (Linkenbach and Perkins, 2005).

This social norms campaign was effective in pointing out that most people do not and will not accurately perceive the social norms of their peers. This fact may explain why otherwise law abiding citizens engage in reckless behavior. Our own behavioral decisions are most often based on what we believe to be normal or what we believe other people are doing. Interestingly social norms studies have found over time that people have remarkably exaggerated views of the risk-taking behavior of their peers. When such misperceptions can be identified and corrected positive changes are possible. “Identifying and reducing the often great disparity between perceived and actual norms is the basis of the social norms approach to prevention” (Linkenbach and Perkins, 2005, p. 6). The social norms message of *MOST of Us Prevent Drinking and Driving* did not include frightening or threatening messages, nor did they try to prohibit people

from engaging in certain behaviors rather the message was to provide people with clear and accurate information about that standards of behavior which exist in the communities where they live. Three stages are needed for a social norms media intervention to work: 1) Target groups is exposed to high levels of the campaign message; 2) Repeated exposure will correct the target groups misperceptions about its peers attitudes and behavior; 3) Having new, more accurate perceptions they will change their own behavior to meet the actual norm (Linkenbach and Perkins, 2005).

There were a few limitations of the data that was gathered in this study. One of the limitations was that changes in the BAC of drivers arrested for drunk driving and the numbers of alcohol-related fatalities could not be corroborated because the data collected was self-reported over the phone during a survey. At the time of this study there was no statewide database in Montana where the BAC of arrested drivers is maintained which would allow for a comparison. Also state crash databases do not record the driver county of residence thus making it impossible to compare whether or not the driver had been exposed to the media intervention. Overall the research demonstrated social norms media when constructed properly will be effective at impacting the perceptions, attitudes, and reported behaviors (Linkenbach and Perkins, 2005).

Effectiveness of Public Awareness Programs

Despite having a minimum legal drinking age of 21, many young people throughout the United States regularly consume alcohol. Alcohol consumption and binge drinking is a large problem for underage adults and alcohol continues to be the number one drug of abuse among young people today. Alcohol related motor vehicle crashes are the cause of many unnecessary deaths and are completely preventable. Public information campaigns can be beneficial in

focusing our attention on the serious consequences that drunk driving can have on our lives and the lives of others but are they effective at changing someone's actual behavior.

During the 1980s and early 1990s there was a plethora of public information campaigns, new laws at both the state and federal level, and new enforcement strategies were tried by police departments across the nation all in an attempt to reduce the incidence of drunk driving fatalities. At the outset there was a reduction in traffic fatalities where alcohol was involved. In 1982 more than 26,000 deaths occurred as a result of alcohol related traffic crashes. In 1994 that number was said to be down by a third to roughly 17,300. However in 2001, the number of deaths caused by alcohol related crashes remained around 17,400 and accounted for 41 percent of all motor vehicle fatalities. There still seems to be resistance by some drivers and this suggests the need for new, more intensive or better tailored drunk driving prevention interventions (Greenberg, Morral and Jain, 2005).

Public information campaigns are designed to help raise awareness about the negative consequences of driving after drinking. Most of these campaigns focus on producing general deterrence effects by emphasizing the deadly consequences of drunk driving. Yet some other campaigns focus on moral inhibitions and social controls against drunk driving. An example of this direct manipulation of social controls and personal values concerning friendship and drinking and driving is the "Friends don't let friends drive drunk" campaign. Empirical evidence has demonstrated that several anti-drunk driving media campaigns have been successful in reducing the frequency of alcohol-involved traffic crashes. "This evidence suggests that moral inhibitions and social controls against driving after drinking, as well as more instrumental fears about the consequences of such behavior, may be able to be manipulated and may be protective against DUI risk" (Greenberg, Morral and Jain, p. 641, 2005). In order for media campaigns to

be most effective the factors that contribute to drunk driving within the specific area should be understood so that key intervention points can be addressed. By analyzing the problem locally a more effective response strategy can be developed.

SECTION III. THEORETICAL FRAMEWORK OF DRINKING AND DRIVING

Social Bond/Control Theory

The social bond theory was written by Travis Hirschi in 1969. This theory later developed into what is now known as the social control theory. A social bond is the degree to which one is integrated with society. Social bonds include ties to the family, workplace, school and society. Hirschi argued that if these bonds are weakened the propensity for delinquency and involvement in crime goes up. He assumed that everyone had an equal opportunity to become criminal and that social ties/controls not moral values help maintain law and order. Hirschi presented four social bonds which would promote socialization and conformity. These social bonds included: attachment, commitment, involvement and belief. The theory proposed the stronger these bonds the less likely one was to be involved in delinquency and crime (Shoemaker, 1990). According to Conklin (2004), “This theory proposes that people who engage in delinquency are free of intimate attachments, aspirations, and moral beliefs that bind them to a conventional and law-abiding way of life” (p. 181). Delinquency and criminal behavior is a choice and there is no forcing one to be criminal or delinquent rather because one lacks these certain ties and commitments they engage in delinquency and criminal behavior.

The four elements attachment, commitment, involvement and belief collectively explain the social control theory of delinquency. Attachment is the degree of psychological and

emotional connection one shares with other people. People who are attached to others will consider what others think, feel or believe about them. Shoemaker (1990) states, "According to Hirschi, attachment is the social counterpart to the psychoanalytic concept of superego or conscience (p. 183). Commitment refers to the investments accumulated by conforming to the rules and regulations of society. Commitment is viewed as the rational aspect of the social bond theory. Things such as time, money, effort and status are all examples of commitment and one weighs what they have to lose by committing crime. Commitment is said to be the social counterpart to the psychoanalytic concept of the ego. Involvement refers to the degree that someone participates in conventional and legitimate day to day activities such as school, work, clubs or other organizations. If someone is involved in conventional activities they have less time and less opportunity to be involved in crime and delinquency. Belief is the idea that one accepts the conventional value system and does the right thing. If the belief system is weakened the likelihood for delinquency goes up (Shoemaker, 1990).

Rehabilitation-Treatment

People will rarely make choices to jeopardize the most important things in their lives on purpose. However, many people will put important things in danger without realizing it. Often when we do realize it, it is too late. No one wants to fail in school, lose career opportunities, money, trust, freedom or self-respect. Yet every day people risk losing these kinds of things because of their high-risk alcohol or drug choices. It is often in a treatment or rehabilitation program where an alcoholic or drunk driver realizes these problems could have been avoided had they sought help earlier.

Both psychological and social factors are important because they influence people in the decisions they make. While psychological influences come from within, social factors include

the influence from family, friends, media and social norms. According to Daugherty and O'Bryan (2004) alcoholism also has a biological component. This biological risk is set at birth and is a trigger level. The trigger level means the level of risk or the point at which the health problem will develop. In adoption studies it was found that people who had a birth parent with alcoholism were four times more likely to develop alcohol or drug problems. While the makeup of genes is something one cannot control the psychological and social factors can be controlled and are often focused upon in treatment or rehabilitation centers.

Psychological research has identified four traits that are common among people who develop alcoholism or addiction: sensation seeking, gregarious, rebellious and impulsive. These are not abnormal traits and not everyone who possesses these traits will be alcoholics or drug addicts. The research simply suggests that high-risk choices are more common among people with these personality traits. When looking at social influences research indicates groups whose members and activities encourage high-risk choices will have higher rates of problems. Personality traits do not cause alcoholism or addiction rather they influence the choices people make about alcohol and drugs. Choices are the one part of the formula that individuals can change and should be the focus of drug and alcohol campaigns (Daugherty and O'Bryan, 2004).

General Deterrence

State laws impose penalties on drunk drivers which range from paying fines to incarceration and loss of vehicle and driving privileges or sometimes a combination of these are imposed on violators. Most often repeat offenders, offenders with higher BAC levels or those who were involved in an accident are subjected to additional or more severe penalties. These sanctions are designed to deter people from drinking and getting behind the wheel. According to Conklin (2004), "The deterrence model assumes that people engage in an act only after carefully

and rationally considering its costs (or risks) and its benefits (or rewards)” (p. 369). The deterrence model proposes that people are likely to comply with the law because the fear of punishment. Within this model the rationale for punishment is to affect future behavior. A criminal penalty is set to discourage people from engaging in behavior which is prohibited by law (Conklin, 2004). There was a heavy emphasis placed on deterring drunk drivers in the President’s Commission on Drunk Driving which stated that States and localities should take a general deterrence approach to the problem. By taking this approach it was thought the largest number of potential drunk drivers could be discouraged (Evans, Neville and Graham, 1990).

The deterrence theory became popular in the 1970s and was said to have a great impact on contemporary crime control policies. During this time the United States was not concerned so much with rehabilitating criminals as it was with making sure the punishments were both certain and severe for the crimes committed (Cullen and Agnew, 2003). Around this same time drunk driving began to be recognized as a serious problem. In 1980 and years since there was a lot of anti-drunk driving activism and legislation formed to address the problem. Mass media on the issue and the establishment of the President’s Commission on Drunk Driving in 1982 put the issue at the forefront of the national agenda. With the Alcohol Traffic Safety Act of 1983 in place financial incentives were provided for states to get their traffic safety programs up to speed with federal recommendations. This national campaign against drunk driving was effective and there was a 16-20 percent reduction in alcohol-related traffic fatalities (Evans, Neville and Graham, 1990).

In one study by Evans, Neville and Graham (1990) it was discovered that community activism, media coverage, and federal financial incentives were responsible for a great deal of legislative activity surrounding drunk driving. They also found that sobriety checkpoints were a

significant deterrent effect. Because sobriety checkpoints suggest an increase in the perceived certainty of detection they were successful at deterring drivers from getting behind the wheel after they had been drinking. Interestingly most of the specific deterrence-orientated laws did not generate noticeable effects on the alcohol-related fatality rates. “A possible explanation for this pattern is that deterrence is operating through a change in national norms about drinking and driving, rather than through driver response to specific punitive laws” (Evans, Neville and Graham, 1990, p. 286).

It appears that social control would be more effective at reducing the level of drunk drivers on the road than would general deterrence. Nationwide advertising campaigns by citizen activist groups will help continue to raise public awareness and make the public less tolerant of such activity. Advertising campaigns along with public lobbying efforts help lead state legislatures to enact new more improved drunk driving laws that impose strict penalties. Along with helping to improve the law advertising campaigns and public lobbying can improve perceptions on the prevalence of drunk driving and others behaviors (U.S. Legal, 2010).

IV. RECOMMENDATIONS

New Additions to Current Community Awareness Programs

Many strategies have been attempted to combat the serious problem of drinking and driving. Often most of these changes are in the form of legislation. From the previous literature it was discovered that the social norms approach was more effective than the fear of punishment in combating drunk driving. While there is a purpose of the BAC to set a legal limit to the amount of alcohol that a person can have in their blood stream and still operate a motor vehicle

this really does not guarantee that people will abide by the law. The number one problem with BAC is that enforcement takes place usually after something like an accident has already happened. Many efforts to combat drunk driving involve either restricting people before they get behind the wheel or punishing them after they have been caught driving drunk. These approaches focus on the behavior of the person doing the drinking.

The social norms approach has demonstrated it is more effective to reach someone before they have been drinking and before they get behind the wheel. After all, alcohol causes intoxication and once someone is intoxicated making rational choices usually goes by the wayside. Using a broad threat of punishment as the focus in media campaigns will likely not be effective at reducing the level of drinking drivers on the road. Instead it has been found that relaying real accurate and up-to-date information about what most other individuals are doing is more effective. There is a high level of acceptability of social drinking in the United States so subsequently there is a high likelihood of a person driving while impaired. Getting the true message out that most people do not or will not drive drunk can change the number of drunk drivers on the road. As the social norms theory said if we perceive other people doing something we to are likely to do it.

Increasing the Effectiveness of Drunk Driving Prevention Programs

In order to make drunk driving prevention programs more effective they have to be personal in structure. Focusing on what people will lose when they drive drunk is a good start. As stated earlier no one wants to lose a job, lose self-respect, money, freedom or family. Intertwining what people value most into these media campaigns would be highly effective. Because many people operate with the idea “it will never happen to me,” making the media campaigns focus on them as the individual and bringing them into the campaign will have better

results. By focusing on what someone risks losing versus the punishment they face if they get caught it may be more beneficial.

Analyzing the local drunk driving problem will give people a better understanding of the factors that contribute to it. Establishing a baseline for measuring effectiveness will allow them to consider possible responses to the problem. Conducting research beforehand as they did in Montana will help to provide accurate data during the media campaigns. Consider who else in the community can help beside the police.

Revising the Target Groups for Awareness and Prevention Programs

Drunk driving is very much the result of a cultural norm that emphasizes drinking alcohol as a form of entertainment and driving as both transportation and entertainment. Because alcohol use is widely accepted in our culture and our use of the automobile is deemed as a necessity there will always be a problem with drunk drivers. Drunk drivers come in all ages and this is an offense committed by a broad spectrum of the population, including those who are otherwise generally law-abiding. However, as the research suggested younger people were more likely to be involved than other age groups and therefore should be the focus of media campaigns. Along with young people repeat offenders are disproportionately responsible for a number of alcohol-related crashes and other problems associated with drunk driving and should also be a target for media campaigns.

V. SUMMARY – CONCLUSIONS

Discouraging drinking and driving through public awareness campaigns can be effective as long as research and planning are done in advance. Identifying the nature of the problem within the target area and then relaying accurate information to the audience will help combat the

problem of drinking and driving. The research demonstrates it is difficult to change public attitudes and behaviors with respect to drinking and driving through public education campaigns. However, such programs help build public support for addressing the problem and can help publicize changes in drunk driving laws. The social norms project in Montana demonstrates that providing accurate information to an audience about drunk driving will be more effective than using other scare tactics that are typical in media campaigns. Correcting peoples misperceptions about how much their peers drink before getting behind the wheel was effective at helping to lower the incidences of drunk driving. While media campaigns may not be able to persuade people to drink less they may be able to encourage people to be more responsible when it comes to drinking and driving.

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