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Review Article

National Prohibition in the United States: A Cognitive-Behavioral Perspective: Part 2: 20th Century National Prohibition

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Abstract

Aim: This is the second of a two part paper that illustrates the importance of cognitive-behavioral factors in the failure of National Prohibition in the United States.

Methods: This second paper discusses the late 19th century forces that initiated National Prohibition, its difficultly with enforcement, and the multiple factors that brought about its repeal in 1933. Part two also details the good, the bad, and the ugly of the 18th Amendment from both cognitive-behavioral and epidemiological points of view.

Findings: Although alcohol consumption decreased and some public health benefits were achieved at the onset of Prohibition, alcohol consumption gradually rose during its tenure, and National Prohibition incurred much opposition and failed as a preventive intervention. Psychological reactance theory predicted the opposition of the population to the loss of an important freedom, and decision theory predicted its demise. In addition, Prohibition was conceived without regard to the ineffectiveness of state prohibition, and it was instituted at a time when 19th century, social mores were being rejected.

Conclusion: National Prohibition violated the Institute of Medicine's guidelines of a universal preventive intervention: being acceptable to the population, having a low cost, and having a low risk. Cognitively, attribution bias contributed to the overlooking of many factors underlying the etiology of problem drinking; psychological reactance contributed to the rejection of National Prohibition; and decision theory accounted for its repeal. National Prohibition also violated the modern framework for an effective intervention, which includes an epidemiological research base and appropriate, cultural timing.

INTRODUCTION

New Year's Eve in St. Louis, 1922

On New Year's Eve in 1922, one of the most popular and exclusive parties in St. Louis was held at the newly opened Chase Hotel. Two thousand two hundred prominent St. Louisans crowded into the spacious Palm Room for dinner, dancing, and midnight merry making. Each table had a card that warned, "Patrons are earnestly requested not to violate the law." At $10 ($120 in 2008) a ticket, guests wore tuxedos and evening gowns, and the Paul Whitman Orchestra was performing.

At 1:30 AM, Gus O. Nations, St. Louis' chief Prohibition enforcer, and five agents entered the Chase. They strolled into the Palm Room and glanced beneath the table cloths in search of illegal alcohol. A woman screamed that an agent mistook her gown for a table cloth; her escort hit the agent; and the outraged party goers shouted, "Throw them out." The crowd became surly and pressed forward; the agents retreated with their guns drawn. Someone knocked down detective Sullivan; he fired a shot into the floor; the bullet ricocheted and hit three patrons: a widow, the son of a court official, and a business owner. The commotion spilled out onto Lindell Boulevard and attracted inebriated revelers.

Mr. Henry S. Priest, a former federal judge at the party and leader of the Missouri Association against the Prohibition Amendment, sued Nations on behalf of the injured party goers. On January 10th, two thousand people attended a rally at the Odeon Theater and cheered speakers, who ardently criticized Nations

and Prohibition. Nations, however, continued to raid stills and speakeasies but was more cautious about public gatherings of prominent St. Louisans [1,2].

National Prohibition

A Momentum for National Prohibition: "The Eighteenth Amendment was the product of a century-long temperance crusade, a progressive environment, and a temporary spirit of wartime sacrifice. Protestant clergy, politicians, business leaders, and social reformers were concerned about American society's increased drinking. Evangelicals opposed liquor because it impaired man's reason and distracted him from God [;]" [3] businessmen, because they believed abstinence would increase efficiency and reduce accidents; Progressives, because they believed Prohibition would fight the social evils due to alcohol abuse; and social reformers urged moderation "to preserve health, morality, and economic well-being." [3] World War I produced enthusiasm for Prohibition as a sacrifice of pleasure for the good of the country, and prohibitionists stressed that the production of alcohol wasted grain needed for the war effort. They capitalized on hostility to anything German and charged that the brewing industry, in which German–Americans were prominent, financed pro-German activities [3].

The Woman's Christian Temperance and the Anti-Saloon League (ASL) had initially campaigned for local and state prohibition from 1906, and by 1919, 90% of townships and rural precincts, 85% of counties, and over 75% of villages were under local or state prohibition. This represented 68% of the American citizens [4]. However, alcohol was readily transported from the "wet" to the "dry" areas, and the ASL decided that a National Prohibition should be implemented by a constitutional amendment. In addition, after the United States entered World War I in 1917, the manufacture of spirits was banned to conserve grain, and in 1918 the sale of beverages with more than 2.75% alcohol was prohibited. These social and political forces provided and impetus for the ratification of the 18th Amendment on January 16, 1919 and the passage of the Volstead Act on January 16, 1920 to enforce it [5].

Thirteen years of Prohibition: The 18th amendment became effective in 1920 and ushered in the 13 year era of National Prohibition. It prohibited the manufacture, sale, transportation, import and export of "intoxicating liquors." The Volstead Act provided for the enforcement of the amendment and defined intoxication liquors as those with 0.5 or more percent of alcohol. The 21st amendment repealed Prohibition on December 5, 1933.

Although National Prohibition had enjoyed substantial consensus in 1919, the problems with enforcement, the association with crime, the emergence of strong opposition, the scandals within the prohibition movement, the changes in American, cultural patterns, the media's portrayal of prohibition, and the Great Depression brought about its repeal.

Enforcement difficulties: The Prohibitionists naively believed that Americans were, by and large, law-abiding and would observe the 18th Amendment with little need for enforcement [3,5]. They did not take into account the American willingness and creativeness in violating the law. Neither the 18th amendment nor the Volstead act made the purchase or use of alcohol a crime. This allowed for the possession of alcohol obtained before Prohibition and made possession insufficient evidence of a crime. The Volstead Act also permitted alcohol for non beverage use, for religious use, and for medicinal use. Medicinal alcohol could be prescribed by physicians and dispensed by pharmacies with the proper permits.

In addition, the Volstead Act specified that enforcement would be carried out by state and federal authorities with the existing resources. This joint enforcement created major problems. Some states such as New York failed to enforce the law, and other states repealed the enforcement laws. New Jersey Governor Edward I. Edwards stated that he would keep New Jersey "as wet as the Atlantic Ocean," and in 1923, New Jersey enacted a repeal and refused to allow state police and other state agencies to enforce Prohibition [6].

Neither Presidents Harding nor Coolidge gave priority to enforcement, and there were only 1500 federal agents for the continental United States. It was only after Herbert Hoover's election in 1928 that substantial federal funds were allocated for enforcement. Thus, Prohibition was a weakly enforced policy with legal exemptions for the possession and use of alcohol [5].

The media focused on the raids of stills and speakeasies, highlighted drinking by the Eastern upper classes, and tended to exaggerate the overall level violation of the law. This gave the impression that nearly everyone violated the law and loosened social inhibitions against violation. Thus, prohibition rapidly acquired the image of a law that was widely disregarded, and this also contributed to difficulty with enforcement [3].

Enforcement of Prohibition was also filled with incompetence and violence. Prohibition Agents were exempt from the civil service regulations and were political appointees. Inadequate salaries - agents' salaries were below that of local garbage collectors - attracted low caliber appointees and corruption [5]. Recruits needed neither character references nor specific qualifications, and some even had criminal records. By 1926, 8% of the agents had been dismissed for improprieties such as bribery, extortion, falsification of records, and theft of alcohol. In 1927, Prohibition agents were placed under civil service; however, 75% of the agents failed the Civil Service examination. In addition, the public was shocked by the violence used to enforce the law, and estimates indicated that state and municipal officers killed more than 1000 people during the 1920s [3].

Physicians in private practice were a significant source of alcohol during Prohibition. Having obtained the necessary permits, physicians could prescribe up to 100 pints of ethyl alcohol every 3 months. Alcohol was used as a medicinal stimulant; hospitals stored large quantities; and physicians could also secure 12 pints of whiskey and 5 gallons of pure grain alcohol yearly for "office use." The Kentucky Medical Journal noted frequent prescriptions for alcohol signed by physicians, who had not even examined the patients. They charged for an office visit, issued prescriptions to fictitious names, and filled prescriptions for themselves [4]. In Chicago more than 15,000 doctors and 57,000 retail druggists applied for licenses to sell "medicinal liquor."

In short, Prohibition did not stop many people from drinking; however, statistics did show a decline in *per capita* consumption

in certain regions. Americans in rural Midwestern areas observed the law whereas those living in large Northern and Eastern metropolitan areas "neither respected nor observed it." There was also class variation in that the working class observed Prohibition more than the middle and upper classes [3].

Crime: Prohibition produced a large black market for illicit alcohol, and huge profits could be made. This contributed to the corruption of the police and public officials and to violence [5]. Gangsters hijacked illegal liquor, bribed police and public officials, and engaged in murderous territorial battles. In Chicago between 1920 and 1930, almost 550 criminals died at the hands of their rivals with a few hundred more at the hands of the police. Gang warfare in New York City was reported to have killed more than 1000. The homicide rate made its biggest increase during Prohibition, and highly visible crimes such as the St. Valentine's Day Massacre created public fears of a "Prohibition crime wave." Gangsters were elevated to celebrity status, and Americans were beginning to believe that Prohibition had made society more dangerous instead of more safe [3].

Organized Opposition: By the mid-1920s, Americans had become aware of the weaknesses of Prohibition with its poor enforcement, crime, corruption, and governmental incompetence. By the late 1920s, the Association against the Prohibition Amendment (AAPA) and the Women's Organization for National Prohibition Reform (WONPR) were supported by business leaders, professionals, and women's organizations. In 1928, the AAPA released the pamphlet, *Scandals of Prohibition Enforcement*, which vividly described law enforcement corruption, and the pamphlet, *The Cost of Prohibition and Your Income Tax*, which stated that the government lost $936,000,000 in liquor tax revenues due to Prohibition and spent $36,000,000 in its enforcement. This loss in income and this expenditure markedly exceeded the federal income tax revenue of $53,000,000. The pamphlet, *Canada Liquor Crossing the Border*, pointed out that Prohibition agent confiscated only 5% to 10% of Canada's liquor exports to the United States. The effectiveness of these pamphlets emanated from their quotation of statistics without editorial comment [3].

In 1929, the Women's Organization for National Prohibition Reform challenged the prior assumptions of the women, who were important in the adoption of the 18th Amendment. They argued that Prohibition had produced more drinking, more endangerment to youth, more corruption, and more contempt for the law. By 1930, The WONPR had 1.5 million members and attacked the stereotypical view of unanimous, female support for Prohibition.

In addition to women and business leaders, lawyers and physicians also began to support repeal. The Voluntary Committee of Lawyers, which was closely associated with the AAPA, worked with local bar associations to adopt resolutions urging the repeal of Prohibition. At the 1929, American Bar Association convention, 68.5% of the 20,119 lawyers polled favored repeal. Prohibition cases clogged the courts, and bootleggers and moonshiners overcrowded the jails. The AAPA pointed out that "Prohibition cases accounted for nearly two-thirds of all federal district court criminal cases" [3] and concluded that "the Prohibition burden was preventing American courts and prisons from dealing with the alarming increases in other forms of crime" [3].

New Jersey physicians turned away from their original support of Prohibition. In 1921, the physician's role in prescribing medicinal whiskey was a topic of debate in the American Medical Association (AMA). The AMA's Committee on Scientific Research stated that "the medical restrictions of the Volstead Act are obstacles to the free practice of therapeutics." They "protested the undue regulation of therapeutics by statute" [6]. In 1924, the AMA protested the arbitrary dictum that a patient should be restricted to one pint of whiskey every ten days and called it "an absurd theory that Congress may substitute itself for the physician" [6]. The AMA admitted that "…[s]ome doctors will yield to the temptation to prescribe liquor where it is unnecessary and become bootleggers in disguise, but Volsteadism had not prevented unscrupulous abuses and will never entirely prevent them" [6].

Prohibitionists' Indiscretions: The negative publicity garnered by the prohibitionists themselves was also detrimental to their support. The Reverend W. C. Shupp, Missouri's Anti-Saloon League superintendent, was exposed for influencing Prohibition officials to grant lucrative, medicinal liquor permits to his drug company and to raid bootleggers, who were not paying him bribes. William "Pussyfoot" Anderson, the superintendent of the New York Anti-Saloon League, was convicted of forging financial records to conceal his skimming of contributions. Wayne Wheeler, the Anti-Saloon League's general counsel and chief Washington representative, who defended the use of wood alcohol as denaturant after dozens of Americans died of liquor contaminated with it, was fiercely criticized in the press. Bishop James Cannon, a powerful member of the Anti-Saloon League, was charged with hoarding flour during World War I and selling it at a large profit, with stock speculation, with misappropriating funds, and with committing adultery with his secretary. These multiple scandals along with the overwhelming support of the Ku Klux Klan severely damaged the moral authority of the Prohibition movement [3].

Social Forces: The 18th Amendment asserted social victories: Protestant over Catholic, rural over urban, tradition over modernity, and middle class over upper and lower class. However, in the 1920's, American society was changing rapidly, and the older codes of conduct were giving way to newer ones. The younger generation flaunted convention with alcohol as symbol of rebellion and with a freer sexuality for women. In addition, technological advancements such as automobiles, radios, telephones, and motion pictures created more opportunities for leisure, consumption, and communication. "Books and movies glorified self-indulgence, drinking, sexuality, individualism and moral freedom" [3] "The… press drew a vivid picture of a disregarded law" [7] with constant reports of raids on speakeasies and stills. "Magazines…frequently referred to drinking by Eastern upper classes…" [7] and H. L. Mencken, an influential writer of the time, was an outspoken critic of Prohibition.

"…[By] the…[mid 1920s]… movie-goers were being subjected to a wave of films on uninhibited, youthful, jazz-age, 'flapper' society " [7]. In 1930, an analysis of 115 films found references

to liquor in 78% and to drinking, in 66%. In 40 of the same films, 43% of the heroes and 23% of the heroines consumed alcohol in comparison with only 13% of the male and 8% of the female villains. Further breakdown showed that intoxication was depicted as humorous in 71% of the films in which it appeared [8]. The prohibitionists had not foreseen these social forces when they had formulated their goals before World War I [9], and "these social currents simultaneously undermined and replaced the consensus that had favored Prohibition" [3].

Economic Forces: In 1929, the Great Depression made prohibition take a back seat to economic and class issues. Labor complained that Prohibition caused economic hardship on the workers in that it eliminated jobs and discriminated against the working class, who could not afford illicit alcohol. In 1931, the American Federation of Labor (AFL) created a committee to agitate for Prohibition reform. Since increasing the income tax was impossible, Americans argued that the liquor industry had once produced 25% of the country's tax revenue and pointed out that repeal would benefit farmers of corn and rye. The Great Depression energized the repeal movement and forced the repeal issue into the 1932 presidential election [3].

THE REPEAL OF NATIONAL PROHIBITION

In May 1929, president Herbert Hoover appointed the Commission on Law Enforcement and Observance (the Wickersham Commission) to study the problems of the enforcement. The Commission documented the disorganization and inadequacy of Prohibition enforcement and the widespread defiance of the law. Although most individual commissioners thought that Prohibition was unenforceable, the official conclusion of the Commission was against repeal. This report contributed to the general agreement that Prohibition was ineffective.

In the 1932 election with Hoover as their candidate, the Republicans refused to put a repeal plank in their platform. In contrast, the Democrats adopted a repeal plank, and the election of Franklin Roosevelt was viewed as a vote for repeal. The election also significantly increased the number of anti-Prohibitionists in congress. On January 9, 1933, the Senate Judiciary Committee produced a resolution calling for the repeal of the 18th Amendment. By December 5, 1933, Utah became the 36th state to ratify the 21st Amendment. National Prohibition was over [3].

REPEAL IN ST. LOUIS, APRIL 7, 1933

"Crowds formed outside the city's two breweries and jammed 'watch parties' in hotels, restaurants, and neighborhood diners. The festive bustle befitted a New Year's Eve." "The countdown led to 12:01 a.m. Friday, April 7, 1933, when beer would be legal again after 13 long years." "More than 25,000 enthusiasts kept vigil outside Anheuser-Busch Inc.…where a revived work force had prepared 45,000 cases of beer and was busily brewing more. An additional 10,000 people crowded Forest Park Avenue at Spring Avenue, where Joseph Griesedieck…had 40,000 cases ready for midnight's stroke."

"At midnight, the brewery whistles were overwhelmed by the roar of happy humans. Out rushed the first beer trucks, plus a Clydesdale-drawn hitch for show. August A. 'Gussie' Busch Jr. spoke to a national radio audience, then went inside to greet his private guests. 'Come and get it,' he told them."

"Brewers shipped straight to the lucky holders of 3,763 new government permits allowing for the sale of beer…At 12:08 a.m., a truck pulled up at the Elks Club…where Mayer-elect Bernard Dickmann led the first round…Customers at the big hotels snapped up 10-cent drafts. At 12:58 a.m. the taps flowed again at Krumm's Restaurant…a popular beer joint before Prohibition."

"Imbibers…declared the first batch 'as good as the old stuff.' By noon, it was gone. Frantic calls for resupply swamped brewery switchboards" [10].

AFTERTHOUGHTS

National Prohibition: the Good

Prohibition's Public Health, Social, and Economic Impact: The evaluation of Prohibition involves whether public-health benefits were achieved at an acceptable social and economic cost. Epidemiologic data shows that a decline in alcohol-related deaths and arrests began in 1917, some 2 years before the passing of the 18th amendment and 3 years before the Volstead Act. After 1921, both alcohol consumption and these indicators increased, and by the time of repeal in 1933, they were 60-70% of the pre-Prohibition levels. Skeptics of Prohibition have argued that Prohibition was a failure because of the increase in consumption and in alcohol-related arrests and deaths during its tenure. In contrast, the Prohibitionists have argued that the decline in these parameters before National Prohibition was due to the state-based and local prohibitions of alcohol and the wartime restriction of its manufacture and sales [5].

There were social gains during Prohibition. Welfare agencies reported a decrease in alcohol-related family problems. The abuse of women and children dropped dramatically during the first 8 years, and the "crimes against chastity" decreased by 33%. Alcohol-related divorces fell by 52% in the first 7 years, and the number of cases of parental neglect in Massachusetts fell from 48% in 1916 to 22% in 1924 [4].

The Wickersham report noted that the greatest social gain was the demise of unhygienic and unsavory saloons. However, Schwartz [4] pointed out that the influenza epidemic might have frightened workers away from the saloons.

The advocates of Prohibition had attributed the economic prosperity of the mid-1920s to Prohibition because they had predicted that limiting access to alcohol would increase worker productivity and reduce absenteeism. However, the Great Depression of 1929 eliminated that argument. The economist Clark Warburton believed that the most significant negative economic impact of Prohibition was the loss of federal tax revenue from alcohol sales and production [5].

National Prohibition: the Bad

Prohibition's Failure as a Preventive Intervention: The failure of Prohibition has, heretofore, been examined from a historical, social, and economic stand point. However, it may also be evaluated with respect to the scientific mistakes of those, who

proposed and planned it, and the psychological perspectives of those, who experienced it. We shall first examine the prerequisites of an effective, preventive intervention and determine whether Prohibition met these standards.

Mental Health Prevention: Let us first look at the definitions of mental health prevention. The 1994 Institute of Medicine report defined mental health prevention as "those interventions that occur before the initial onset to the disorder," [11] and a universal preventive intervention targets the "general public or a whole population that has not been identified on the basis of individual risk" [11]. The report pointed out that "universal interventions have advantages when their cost per individual is low, the intervention is effective and acceptable to the population, and there is a low risk from the intervention" [11].

Kaplan pointed out that primary interventions also include public policy changes and that "primary prevention almost always requires behavior change, successful primary prevention efforts must use behavioral theories and behavioral interventions" [12]. Winnet [13] has proposed a framework for prevention programs that encompassed the epidemiology of the disorder to be prevented, national policy, timing of the prevention, marketing of the prevention, and research-based prevention.

From the aforementioned definition, National Prohibition may best be categorized as a universal, preventive intervention, which was a change in public policy. As mentioned previously, universal preventions are advantageous when they are acceptable to the population, have a low cost, are effective, and have a low risk. It was also pointed out that prior epidemiological research and the timing of the intervention are important. The following paragraphs examine whether National Prohibition had these advantages.

The Acceptability of Prohibition: The most important criteria for the success of a universal, preventive intervention is its acceptability. Universal preventions such as seat belts, prenatal care, and immunization, by and large, have been readily accepted by Americans. From its history of state and federal repeal, one may easily surmise that the prohibition of the manufacture and sale of alcohol was not acceptable to a sizable proportion of the American population. Many individuals believed that an important freedom had been taken away.

Psychological reactance theory [14] predicts that if a freedom is taken away from an individual, that individual is motivated to restore it. Two main variables that determine the strength of that motivation are: the expectation and the importance of that freedom to the individual. People are highly motivated to restore freedoms, which they expect to have and which are important to them. The cognitive, emotional, and behavioral responses of the individual to this loss of freedom include: an increased attractiveness of the lost freedom, direct and indirect behaviors to restore the lost freedom, and hostility towards the person or institution that removed the freedom. From the above discussion, one may easily surmise that the 18th amendment removed an expected and important freedom from very many Americans and easily observe that they responded by breaking the law to restore that freedom and that they exhibited hostility towards those, who agreed with the law and tried to enforce it.

The Cost and Effectiveness of Prohibition: As pointed out, National Prohibition was both financially and morally costly to the United States. It led to a net loss of revenue to the federal government that was made especially evident during the Great Depression. It was also costly in terms of inducing immorality. It not only enriched the criminal element but also tempted once law-biding and marginally law-bidding citizens to break the law either by imbibing, making, transporting, selling, or inappropriately prescribing alcohol.

Although alcohol consumption and alcohol related social and health problems were less after the initiation of Prohibition than two years before, they steadily increased during the 13 years of Prohibition. Thus, the National Prohibition of alcohol was not effective in keeping individuals from consuming alcohol and having health and behavioral problems. However, one may not ignore the decline in consumption and alcohol problems in the two years prior to the start of Prohibition. This decline, indeed, could have been due to wide spread local and state alcohol prohibition, to anti-alcohol education in schools, to the limitation of alcohol during World War I, and to the closing of saloons.

Decisional theory postulates that an individual will not continue a course of action unless he or she expects the gains (benefits) to exceed the losses (costs) [15]. This is not the absolute value of gains or losses but an amount of gain and loss in comparison to what the individual or other individuals have experienced in the past. Thus, an individual may not tolerate or chose a beneficial outcome if it is below the expected or experienced in the past, and may tolerate or chose a costly outcome if it is less noxious than the expected or experienced.

In championing the repeal of National Prohibition, the American public appeared to have realized that, the cost of prohibition to society in moral disruption and financial loss was greater than the benefit. In addition, in terms of numbers, the negative consequences of National Prohibition affected more people than the negative consequences of alcohol itself. Thus, for American society as a whole the cost was greater than expected, and the benefit was less than expected. Hence, the decision was made to repeal the 18th Amendment

The Disregard of Prior Historical Data: A major problem with the passing of 18th Amendment Prohibition was that the beliefs and assumptions of the prohibitionists ignored the past negative, historical experiences of the states with prohibition. They still assumed that once a national law was passed, it would be obeyed and could be enforced. They assumed that National Prohibition would eliminate the transportation of alcohol between states; however, they overlooked its transportation into the United States by sea and across the borders. In simple terms, neither historical nor epidemiological research appears to have been carried out, and many of the same problems that had occurred on a state level in Kansas, also took place on a national level. In short, ignoring data and developing a policy on untrue assumptions will lead to failure of that policy.

The Misfortunate TimingL: Another issue is that a policy may be more applicable in one given time period and culture than in another. An unavoidable problem was that the prohibitionists were unable to foresee both the liberalization of societal values

during the roaring 20s and the influence of the new, mass-media technology (radio and motion pictures), which often glamorized illegal drinking, speakeasies, and criminal behavior. Recent studies have shown a positive correlation between the frequency of viewing alcohol consumption in motion pictures and drinking behavior in adolescents. Exposure to alcohol use in movies has been associated with early-onset teen drinking [16], with favorable opinions towards peers who drank alcohol (alcohol prototypes), and with positive, alcohol expectancies. These cognitions correlated positively with a willingness to drink, which was directly associated with underage consumption [17].

Adolescent high, movie exposure to alcohol has also been directly associated with a shorter time to the onset of drinking and a shorter time from onset to binge drinking [18]. It has been indirectly associated with problem drinking [19].

In addition, research has indicated that an individual's violation of a prohibition was influenced by both the presence of a confederate, who violated that prohibition, and the status of that confederate: the higher the status of the violating confederate, the more likely the subject was to follow suit [20-22]. Blake and Mouton state that "it may be concluded that the mere passage of a law will not in itself insure conformance on the part of those whose behavior it affects. For example, if one sees others [not] conforming [with the law], even in the absence of specified penalties, it is likely that one will experience strong social forces in the direction of 'behaving the same way' " [21].

Thus, motion pictures, which showed the consumption of alcohol in a favorable manner by high-status individuals, provided a model for behavior that was the antithesis of the law.

National Prohibition: the Ugly

Does History Repeat Itself?: Thus, there are psychological, economic, and social forces that interact to influence the efficacy of intervention; however, what patterns seem to persist overtime? Three that can be readily identified are: the potency of the substance, the existence of more encompassing societal problems, and financial backing of the supplier.

An increase in the potency of the psychoactive substance increases the probability that it will adversely affect the user's behavior. This negative, behavioral effect will evoke an adverse response from those with whom the user comes in contact.

They consequently will react in a way to control the behavior of the user. This occurred in colonial times when the consumption of more potent whiskey was added to the consumption of less potent beer and cider. This has also occurred in the 20th century when potent, inexpensive crack cocaine was added to the less potent, more expensive cocaine hydrochloride. The early temperance and prohibition movements were introduced with the increased consumption of hard liquor, and more stringent, 20th century, antidrug laws were introduced after the appearance of crack. Thus, an increase in psychoactive and addictive potency appears to be followed by an increase in societal intervention [23].

Although the pathologic consumption of alcohol was of importance to society, it was eclipsed by the abolition of slavery and the Great Depression. Both issues affected a much larger number of citizens morally and economically than pathological drinking and, hence, took precedence. The temperance-prohibition movement took a back seat to the Civil War, and National Prohibition was repealed during the Great Depression. Thus, it seems that more encompassing social problems take precedent over more limited ones.

The economic power of the supplier of the psychoactive substance also crucially affects intervention. Saloons became a problem in the late 1800s and early 1900s after they began to be controlled by a well-financed, competitive alcohol industry, which aggressively promoted the rapid expansion of outlets and consumption. In the 20th and 21st centuries, large, extremely wealthy, drug cartels control the production and distribution of illicit drugs. Wealthy distributors of psychoactive substances have fought against and continue to fight against intervention in the distribution and sales of their product.

CONCLUSION

Cognitive – Behavioral Aspects

If one defines National Prohibition as a primary universal preventive intervention which included a public policy change, Kaplan pointed out that this intervention requires behavior change and that efforts must be made to employ behavioral theories [12]. From a cognitive-behavioral standpoint, part one of this paper pointed out that National Prohibition was based on attribution bias. Both the temperance and prohibition movements believed that alcohol itself was the blame for habitual drunkenness, and with the exception of saloons, they did not address contextual factors such as urban crowding, long work hours, hazardous work conditions, and poverty. These issues were addressed by other movements during the Progressive Era.

In part two, psychological reactance theory explains the behavior of a significant portion of the population during National Prohibition. For many Americans, the consumption of alcohol was an expected and important freedom that had been taken away and they reacted to the removal of this freedom by breaking the law: they bought, sold, manufactured, imported, and consumed alcohol. Decision theory accounts for the repeal of Prohibition. The public felt that the costs in terms of blatant of crime, loss of employment, and loss of government revenue exceeded the benefits of a transient decrease in alcohol related problems. They developed strong opposition to the 18th Amendment and elected government officials who favored its repeal. Thus, from a cognitive-behavioral standpoint, the attribution bias of the advocates of Prohibition and the psychological reactance of its recipients were two factors that lead to its ineffectiveness as a public-health intervention.

Cognitive errors have been investigated more in medical diagnosis than in prevention and policy, and they have been found to make up the highest proportion of medical errors in diagnosis. Graber [24] reported that 74% of medical diagnostic errors involved cognitive factors and that diagnostic errors have been associated with higher rates of morbidity than other types of medical errors. In a 25 year analysis of United States malpractice claims, Tehrani and coworkers reported that diagnostic errors were "the most frequent, most severe, and

most costly of all medical mistakes" [25]. Diagnostic-related errors accounted for 28.6% of malpractice allegations, had a 40.9% death rate vs. 23.9% for all other malpractice allegations combined, and accounted for a 25 year total payment of 38.8 billion US dollars in 2011 terms. Croskerry [26] pointed out that fundamental attribution error was one of the many cognitive errors of physicians that lead to misdiagnosis.

The most common factors that contributed to cognitive error were faulty synthesis: the faulty processing of information and faulty verification. The single most common error in faulty synthesis was premature closure: "the tendency to stop considering other possibilities after reaching a diagnosis." [24] Simon pointed out that "[p]icking the first satisfactory alternative solves the problem of making a choice whenever (a) an enormous, or even potentially infinite, number of alternatives are to be compared and (b) the problem has so little known structure that all alternatives would have to be examined in order to determine which is optimal" [27]. Common vernacular would call this "jumping to conclusions."

Attribution bias and "jumping to conclusions" have been major contributors to diagnostic error in medicine; however, it is not clear if research has been carried out to evaluate misdiagnosis as a cause of failed, public-health interventions. Attribution bias certainly appears to have been a major factor in the failure of National Prohibition.

Epidemiological Aspects

National Prohibition violated the Institute of Medicine guidelines for an effective intervention [11]. The cost of National Prohibition was not low economically or morally. National Prohibition was not effective, was not perceived as safe because of the blatant criminal activity that it engendered, and was not acceptable to a significant portion of the American population. As Kaplan [121] pointed out, a primary intervention requires a behavioral change, and clearly, abstinence from alcohol was a behavioral change which the majority of Americans were not willing to make.

Prevention should take into account the epidemiology of the disorder, research, and timing [23]. National Prohibition violated a number of these guidelines. No epidemiological studies appear to have been carried out, and the policy was instituted without regard to prior state experience. A number of state prohibition laws had been rescinded for various reasons, and many of the problems of Kansas Prohibition reappeared in National Prohibition. Although National Prohibition would prevent the transportation of alcohol across state lines, it was unrealistic to think that it would prevent importation across the boarders and by sea. Finally, Prohibition came at a time when American culture was rapidly becoming more liberal and more interconnected through the effects of mass media and other technological advances. In other words, National Prohibition was a culturally inappropriate intervention. Perhaps Hugh Fox was correct in advocating a harm-reduction model of *"regulation, not elimination"* [28].

In summary, public-health interventions are similar to individual health interventions in that for efficacy, the diagnosis must be correct and the prescribed treatment must be acceptable. If a population or individual is misdiagnosed or the prescribed an unacceptable treatment, the intervention will fail. This paper uses National Prohibition to point out that cognitive error such as attribution bias is important in the misdiagnosis of a public-health problem and of an individual patient. It also points out that behavioral theory must be taken into account for an intervention to be efficacious. Psychological reactance theory accounts for the American public's non-compliance with National Prohibition, and decision theory accounts for Prohibition's demise. The cost of Prohibition was greater than its benefit, and it was repealed.

In order to evaluate both public health and individual medical problems, a thorough history must be taken. Many factors in the etiology of the disorder must be explored, not just the most obvious. More subtle contextual information must be evaluated. In short, research must be carried out. For the medical patient, this is accomplished in part by taking a careful history from the individual or a reliable informant; for a population, this is accomplished by thorough epidemiological investigation. Thus, for the treatment of populations and individuals careful assessment must be made to minimize cognitive error, to decrease the possibility of misdiagnosis, and to formulate an acceptable and cost effective intervention.

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REFERENCES

1. O'Neal T. Prohibition donnybrook spices New Year's Eve. St. Louis Post-Dispatch. 2012; B3.
2. Courtaway R: Glitz and gunfire: the Hotel Chase riot of New Year' Eve, 1922. Voices: Online Magazine of the Missouri Historical Society. Summer 2008.
3. Vance RP. The demise of Prohibition. The Concord Review, Inc. 2001; 12: 97-116.
4. Schwartz RH. Prohibition, 1920 to 1933: an overview of its effects on public health and the economy. South Med J. 1992; 85: 397-402.
5. Hall W. What are the policy lessons of National Alcohol Prohibition in the United States, 1920-1933? Addiction. 2010; 105: 1164-1173.
6. Sherk HH. Prohibition. The Wets versus the Drys in New Jersey. N J Med. 2003; 100: 24-27.
7. Kyvig DE. Repealing National Prohibition. Kent, Ohio: The Kent State University Press. 2000.
8. Dale E. The Content of Motion Pictures. New York: The Macmillan Company. 1935.
9. Tyrrell I. The US prohibition experiment: myths, history and implications. Addiction. 1997; 92: 1405-1409.
10. O'Neal T. Revelers welcomed beer back A Look Back * Prohibition ended in 1933, and we were ready to drink and be merry. (Community). St. Louis Post-Dispatch. 2012; B3.
11. Committee on Prevention of Mental Disorders, New directions in definitions. In: Mrazek PJ, Haggerty RJ, editors. Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research. Washington, DC: National Academy Press. 1994.
12. Kaplan RM. Two pathways to prevention. Am Psychol. 2000; 55: 382-396.

13. Winett RA. A framework for health promotion and disease prevention programs. Am Psychol. 1995; 50: 341-350.

14. Wortman CB, Brehm JW. Responses to uncontrollable outcomes: an integration of reactance theory and the learned helplessness model. Adv Exp Soc Psychol. 1975; 8: 277-336.

15. Janis IL, Mann L. Decision making: a psychological analysis of conflict, choice, and commitment. New York: The Free Press. 1977.

16. Sargent JD, Wills TA, Stoolmiller M, Gibson J, Gibbons FX. Alcohol use in motion pictures and its relation with early-onset teen drinking. J Stud Alcohol. 2006; 67: 54-65.

17. Dal Cin S, Worth KA, Gerrard M, Stoolmiller M, Sargent JD, Wills TA, et al. Watching and drinking: expectancies, prototypes, and friends' alcohol use mediate the effect of exposure to alcohol use in movies on adolescent drinking. Health Psychol. 2009; 28: 473-483.

18. Stoolmiller M, Wills TA, McClure AC, Tanski SE, Worth KA, Gerrard M, et al. Comparing media and family predictors of alcohol use: a cohort study of US adolescents. BMJ Open. 2012; 2: e000543.

19. Wills TA, Sargent JD, Gibbons FX, Gerrard M, Stoolmiller M. Movie exposure to alcohol cues and adolescent alcohol problems: a longitudinal analysis in a national sample. Psychol Addict Behav. 2009; 23: 23-35.

20. Kimmbrell DL, Blake RR. Motivational factors in the violation of a prohibition. J Abnorm Psychol. 1958; 56: 132-133.

21. Blake RR, Mouton JS. Present and future implications of social psychology for law and lawyers. J Public Law. 1955; 3: 352-369.

22. Lefkowitz M, Blake RR, Mouton JS. Status factors in pedestrain violation of traffic signals. J Abnorm Psychol. 1955; 51: 704-706.

23. Hatsukami DK, Fischman MW. Crack cocaine and cocaine hydrochloride: are the differences myth or reality? JAMA. 1996; 276: 1580-1588.

24. Graber ML, Franklin N, Gordon R. Diagnostic error in internal medicine. Arch Intern Med. 2005; 165: 1493-1499.

25. Saber Tehrani, AS, Lee H, Mathews SC, Shore A, Makary MA, Pronovost PJ, Newman-Toker DE. 25-year summary of US malpractice claims for diagnostic errors 1986-2010: an analysis from the National Practitioner Data Bank. Qual Saf Health Care. 2013; 22: 672-680.

26. Croskerry, P. The importance of cognitive errors in diagnosis and strategies to minimize them. Acad Med. 2003; 78: 775-780.

27. Simon HA. Invariants of human behavior. Annu Rev Psychol. 1990; 41: 1-19.

28. Fox HF. The saloon problem. Ann Am Acad Polit SS. 1908; 32: 531-538.

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