

The sales of cigarettes to minors in Brazil, Uruguay, and Argentina

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Summary

Objective: *To establish the readiness of merchants to sell cigarettes to minors in three Latin American countries.* **Design:** *A sample of 50 establishments each were tested in six Brazilian cities, as well as Montevideo, Uruguay and Buenos Aires, Argentina. Minors 13 to 15-years-old attempted to purchase cigarettes at each store. In addition, two hundred Brazilian adults were surveyed about whether the law prohibiting tobacco sales to minors should be enforced.* **Main outcome measures:** *Cigarette sales to minors.* **Results:** *Three hundred ninety-nine out of four hundred establishments sold cigarettes to the children. Only one merchant in Curitiba, Brazil refused to sell to a minor. Ninety-three percent of Brazilian adults thought their tobacco age law should be enforced.* **Conclusion:** *The laws against selling cigarettes to minors in Brazil and Uruguay are totally disrespected and unenforced. Argentina lacks such a law due to a 1992 presidential veto. An inexpensive inspection system could markedly decrease sales to minors and significantly decrease tobacco usage by minors. The health benefits of such enforcement would be very high.*

Introduction

Tobacco is the #1 preventable cause of illness and death in these countries and worldwide. The use of tobacco is responsible for an estimated 100,000 deaths per year in Brazil [1], 40,000 in Argentina [2], and 5,000 in Uruguay [3]. In Uruguay, tobacco is reportedly responsible for 18% of all deaths. In Brazil, 32.6% [4] of adults are smokers, in Argentina 35% and in Uruguay 32% [5].

In the U.S., the most common age to start smoking cigarettes is 13 [6]. Approximately 75% of smokers in the U.S. begin smoking before the age of 18, before the age cigarettes can be legal sold to them. Besides this, smokers who start at an earlier age, smoke more cigarettes, have a harder time quitting [7] and suffer higher rates of lung cancer [8].

Studies in the U.S., Japan, Australia, England, and Finland show that the laws the sale of cigarettes to minors have been poorly enforced [9-12]. One study of 93 cities in the U.S. found that 77% of establishments sold cigarettes to 16-year-olds despite an 18-year-old legal age limit. In the same study, 93% of Canadian establishments sold to 15-year-olds despite 16 and 18-year-old age limits in the two provinces tested. In Japan 97% sold despite a 20-year-old age limit.

Three recent studies in the U.S. have demonstrated dramatic decreases in underage smoking one or two years following vigorous enforcement of law prohibiting the sales of tobacco to minors [13-15]. Two years after an inspector in Woodridge, Illinois started testing all tobacco merchants four times a year for tobacco sales to minors by having a minor under his supervision attempt to buy tobacco, not only did the willingness of merchants to sell to minors decrease markedly, but the consumption of cigarettes by 13 to 14-year-olds in the community decreased by 69% with 50% fewer minors becoming smokers [13]. In Leominster, Massachusetts, the percentage of minors 13 to 18-years-old smoking decreased 38% one year after the similar testing of all merchants three times a year with fines of only \$25 and a small risk of license suspension for repeated offenses [14].

The majority of Latin-American countries have laws prohibiting the sales of tobacco to minors under 18 years of age, although some have age limits of 16 and 14 years of age. Several have no law prohibiting the sale to children of any age. Uruguay prohibits the sale of tobacco to minors under age 18. Brazil had a national health regulation established in May, 1990 prohibiting sales to minors under the age of 18, but this was revised in August, 1990 to the age of 16 due to tobacco industry pressure. A bill to establish an 18-year-old age limit and to restrict the advertising of tobacco was passed by the Argentine congress, but vetoed by President Menem in 1992 also after intense lobbying from the tobacco industry.

The purpose of this study was to obtain a measure of how easily minors could purchase tobacco products. The

study also measured the quantity of point-of-sale advertising promoting particular brands of cigarettes, as well as any signs warning of the dangers of smoking or of the law against the sale of tobacco products to minors. In addition, the sale of single cigarettes in Brazil and Uruguay was examined.

Methodology

Six Brazilian cities with populations of over 1 million each were selected for this study: Rio de Janeiro, São Paulo, Brasília, Curitiba, Porto Alegre, and Belo Horizonte. In Uruguay, the capital Montevideo and in Argentina, Buenos Aires were included in the study. A selection of five parts of each city were chosen at random and the first 10 tobacco merchants encountered in each section were tested. An actual random selection of tobacco merchants was not possible since a complete list of tobacco vendors was not available.

Minors ages 13 to 15 were recruited in each city and participated with the permission of their parents. One minor was used in each city. The minor entered the establishment and asked for one pack of whatever was the least expensive brand of cigarette. In Brasilia, Porto Alegre, and Montevideo the youths first requested to purchase one single cigarette and attempted to purchase a pack only when single cigarettes were not available. If the youth was confronted about his or her age, the youth replied that the cigarettes were for his or her parents. There is no provision in either the Uruguay or Brazilian law to allow a merchant to sell cigarettes to a child at any time, even if the child says the cigarettes are for his parents.

After the minor left the establishment, the researcher entered the establishment and counted the number and estimated the size of promotional advertising for particular brands of cigarettes as well as the presence or absence and size of signs warning of the dangers of smoking or of the law prohibiting the sale of cigarettes to minors. The researcher visited 50 establishments in each city in addition to the 50 tested with the minor to measure the amount of promotional advertisements and warnings.

All minors used in the study were non-smokers except in Argentina. All minors were male except in Buenos Aires, Montevideo, and Porto Alegre. There is no law in any of the countries tested prohibiting minors from consuming, possessing, purchasing or attempting to purchase tobacco products.

An interview survey of 100 Brazilians at the large São Paulo bus station and 100 more in a large city park in Brasilia was conducted by the researcher. Each person was asked 1) about his current smoking habits, 2) age when smoking the first cigarette, 3) whether the government should enforce the law prohibiting sales of cigarettes to minors through a system of inspection

checks using a minor to attempt to purchase cigarettes and small fines to merchants caught selling, and 4) whether the age limit should be eliminated, remain the same, or return to 18 years of age.

Tobacco vending machines, a problem in some other countries, do not currently exist in the countries tested in this study.

Results

One hundred percent of tobacco merchants sold cigarettes to the minors in all cities except for Curitiba, Brazil where 98% sold, i.e. one merchant refused to sell to the minor involved. In São Paulo and Porto Alegre, 10% of merchants did ask the minor if the cigarettes were for himself or someone else. In Curitiba, 4% of merchants asked this question. All of the merchants who asked this question, sold the cigarettes to the youth after the youth said the cigarettes were for his parents. Many of merchants who sold single cigarettes in Porto Alegre and Brasilia did ask the youths if they wanted the cigarettes lit.

One single merchant in Rio de Janeiro had a large sign saying in Portuguese, "I do not sell cigarettes to minors. I am an agent of health". In 1991, the Brazilian Ministry of Health distributed 100,000 of these signs to the nation's tobacco merchants for voluntary display. Two other establishments in Rio de Janeiro did have much smaller signs saying that it was illegal to sell tobacco to minors. Also, 11% of establishments in Rio de Janeiro had a sign saying in large letters, "O FUMO FAZ MAL À SAÚDE" ("Smoking is hazardous to your health"). This sign also noted that its posting was mandated by a 1987 municipal law that carried a fine of 30 UNIFs (about US\$90) if the sign was not posted and loss of the right to sell tobacco for a second infraction.

In Belo Horizonte 9% and in São Paulo 8% of establishments had signs noting that it was prohibited to sell cigarettes to minors. No other establishment in the study had any other tobacco warning sign.

The average number of advertisements promoting the use of tobacco ranged for one to 10 per establishment in the various cities. Buenos Aires had the largest amount of space devoted to promotional advertising, two square meters per establishment. Porto Alegre, which had the largest number of promotional ads per establishment [10], had 1.2 square meters of such advertising. Curitiba, São Paulo, and Rio de Janeiro each averaged 0.9 square meters of ads, Brasilia 0.6, Belo Horizonte 0.4, and Montevideo 0.1 square meters. The Ministry of Health warning sign measured 0.15 square meters and the other warning signs ranged from 0.02 to 0.06 square meters.

The space dedicated to promotional advertisements was roughly 150 times the space given to warnings or "counter-advertisements". Most of the promotional

advertisements did have small, barely noticeable, mandated health warnings.

In Porto Alegre 88% of merchants sold one single cigarette to the minor and in Brasilia 82% did so. In Montevideo, where a national law prohibits the sale of single cigarettes, only 4% sold a single cigarette to the minor. All other merchants in these cities sold full packs of cigarettes to the minors.

Of the 200 Brazilian adults surveyed, 27% were smokers, slightly below the national average. Eighty-nine percent of the smokers and 94% of non-smokers, or 93% overall supported the government enforcing the tobacco age law. The system of enforcement explained to those interviewed was the testing every merchant several times a year by having a youth attempt to purchase cigarettes under the supervision of an adult inspector. Seventy-four percent favored raising the minimum age at which merchants may sell cigarettes to young persons back to 18 years of age. Of the smokers between 20 and 40 years of age, 72% began to smoke before age 18.

Discussion

This study demonstrates that merchant respect for the laws prohibiting the sales of tobacco to minors in Uruguay and Brazil is extremely poor despite some governmental merchant education efforts in Brazil. No one encountered by this researcher knew of any instance of enforcement of any of the laws regarding sales to minors or of the posting of required signs.

The purchase research was conducted in Argentina to demonstrate the easy access to tobacco by minors even though no law existed prohibiting such sale. A simultaneous study of alcohol sales to minors in Buenos Aires found 94% of merchants sold alcohol to a 16-year-old and 65% to a 14-year-old despite an established penalty of a US\$ 120 fine and 15 to 30 days in jail for the owner. Signs with very fine print explaining the alcohol age law and penalties were posted in 56% of the Argentine establishments. In three of the Brazilian cities, a simultaneous alcohol study found a 99% purchase rate by 12 to 15-year-olds despite a law mandating up to one year in prison for sales to a minor [16]. Again, no one was aware of any enforcement of these laws in recent years.

In Brazil, there is a problem in some cities of street vendors selling tobacco. These would be very difficult to regulate. The street vending of alcoholic beverages is not permitted by law and rarely occurs.

The sale of individual cigarettes is thought to encourage experimentation by young people. A law prohibiting this practice in Uruguay may be part of the reason this rarely occurs there.

The high rate of point-of-sale advertising found in this study suggests both that the tobacco industry has

found this an effective way to sell cigarettes and that merchants have a large amount of available space in which they could post government mandated counter-advertisements. In the opinion of this researcher, counter-advertisements need to be large in size, e.g. at least 28 cm x 43 cm, with large lettering and must be required to be prominently displayed where the purchasing public can see them. Many of the promotional ads noted in this study were in very prominent places, e.g. on large wall clocks, restaurant wall menus, large outdoor illuminated signs, attractive wall posters etc. Counter-advertisements can have an important health benefit at little cost to the government or the merchants. The posting of such signs could be easily verified during the proposed routine inspections. The televising of counter-ads on television in the U.S. has been linked to sizeable decreases in public smoking [20, 21].

The very strong public support for the enforcement of the tobacco age law by the Brazilian adults surveyed is similar to findings in a larger U.S. survey [17]. The actual enforcement of such laws by inspections using minors under adult supervision has been found to be able to be low cost and highly efficient. I estimate the cost of such enforcement in the U.S. has been calculated at \$28 per establishment per year for three inspection checks or \$35 for four inspections [9]. Enforcements costs in the countries in this study should be at most half the cost of U.S. enforcement due to a much lower wage scale. It is estimated that roughly one inspector is needed for each one million inhabitants to conduct these checks. This assumes the inspector spends four hours each work day conducting inspection checks and averages seven to ten checks per hour, a rate found in several U.S. cities doing enforcement.

The U.S. federal government has recently passed a law requiring the individual state governments in the U.S. to effectively enforce the tobacco age laws or face a loss of millions of dollars of federal grant monies [18]. States will be required to reduce the percentage of merchants found selling to a minor on a random scientific test to below 20% by the fourth year of their enforcement programs [19]. There are also reports of growing efforts to improve tobacco age law enforcement in Canada, England, and Australia. Several more countries have recently established minimum age laws or increased the minimum age to 18 or 19.

The proposed inspection system may also be able to be a deterrent to contraband cigarettes whose sale has been a recent problem in both Brazil and Argentina. This problem was the stated reason for decreasing the Argentine tax on cigarettes in 1992, thus lowering the cost of Argentine cigarettes and lowering the cost advantage of contraband cigarettes.

The cost-effectiveness of the proposed system of tobacco age law enforcement may be quite high. While the components of a cost-effectiveness analysis are

inadequately studied, a very rough estimate may still be of value. First, we will assume that 72% of smokers would otherwise have started before age 18 and that, because of a system of enforcement of an 18-year-old age law, 38% fewer of these young people pick up the smoking habit as in the Leominster study. If we also assume that half of these 38% never pick up the habit even after turning 18 years of age, there would be 14% fewer adult smokers. In the long run there would be at least 14% fewer people dying of tobacco-related illness. At current rates, that would be 14,000 Brazilian lives saved per year. One study of average American male smokers found they lost an average of 20.6 years of life [22]. Using this figure, the enforcement effort would save 288,000 years of life per year. Estimating one tobacco merchant for every 500 inhabitants, a reasonably efficient national inspection system in Brazil would cost roughly \$5,000,00. This cost could be covered by a \$25 annual license fee or by the fines generated. The expenditure per year of life saved would be \$18. With 5% discounting for 45 years, the cost is still only \$150 per year of life saved. Additional health benefits would accrue from decreased morbidity. These would make the enforcement of laws prohibiting the sale of tobacco to minors one of the most cost-effective health care interventions available.

One final observation by this researcher. In these three countries, there appeared to be considerable public pessimism that their governments could carry out any successful enforcement of the law. However, in every city visited, the municipal governments appeared to be conducting quite successful enforcement of no parking laws. This is a type of enforcement similar to but actually more time-consuming and with greater fine collection difficulties than the enforcement of laws against selling tobacco to minors. One additional difference between no parking and tobacco age laws is that illegal parking causes others to lose a few minutes finding a parking space, whereas the sales of cigarettes to minors causes people to become addicted to a deadly product and lose many years of life.

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