Funding Public Health: The Public's Willingness to Pay for Domestic Violence Prevention Programming

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Objectives. The author investigated the willingness of the general public to pay for domestic violence prevention programs.

Methods. An experimental design was used in a telephone survey of 522 California adults. One of 11 funding methods and one of 4 dollar amounts were randomly assigned to each respondent.

Results. Most respondents (79.4%) reported support for domestic violence prevention programming. They were most willing to pay $5 or less via "user fees" (e.g., increased fines for batterers) and humanitarian "donations" (e.g., sales of special postage stamps).

Conclusions. Health departments that want to increase their domestic violence prevention programming need to identify widely accepted methods by which funds can be raised. The methods used here can be applied to numerous public health activities and issues. (*Am J Public Health.* 2003;93:1934–1938)

Core public health functions are funded through allocations from taxes gathered at the local, state, and federal levels. Although these allocations usually are not reliant upon public opinion, such opinion can play a role. Results of a 1996 poll indicated that most people have little or no idea of what "public health" means.[1] Nonetheless, that poll and a follow-up poll conducted in 1999[2] revealed that public health activities, including health promotion and disease prevention, immunizations, and environmental risk reduction, are perceived as very important by almost all. In addition, a plurality of the public believes that disease prevention and health promotion should be a higher priority than treatment of disease.[2]

Public health expenditures represent a very small portion of total health care expenditures[3]; only 1% to 2% of the health care budget is allocated to prevention.[4] Federal public health agencies draw upon the considerable financial resources of the national income tax for their funding, and, at the same time, they have relatively few mandated responsibilities.[5] State governments depend on less robust state income taxes for funding about one half of their public health efforts.[5] In addition, as the principal entity responsible for protecting the public's health,[6] states are mandated to provide many more services than is the US federal government.

Although broad definitions exist regarding essential public health services,[6] funding for efforts that are not traditionally considered core public health activities generally is obtained from special assessments or taxes. For example, tobacco taxes have been used to underwrite popular smoking cessation campaigns. Marriage licenses are another example of such an assessment; in some states a portion of the fee for each marriage license issued is used to support battered women's shelters.

The study described here provides an example of a straightforward technique by which to obtain information from members of the general public on their opinions regarding the acceptability of various regressive taxes. The present method is a variation on the often intricate approach of economists who have addressed, along with global warming and other topices, the public's willingness to pay.[7,8] The information gained through this method is relevant to legislators and to health department personnel and community-based advocates who advise policymakers about expanding public health efforts. The content area under investigation in the present study was programming designed to prevent domestic violence, a major source of intentional injury morbidity and mortality among women,[9,10] as well as a source of multiple negative health sequelae.[11]

METHODS

Sample

The data used here are from a California community-based study assessing social norms regarding domestic violence.[12,13] The main study comprised several samples, including a cross-sectional one; in addition, members of certain ethnic and language groups were oversampled. Study data were collected by the National Opinion Research Center of the University of Chicago. After focus group meetings, pilot testing, cognitive interviews, and a translation and back-translation process designed to ensure equivalency of survey forms, telephone interviews were conducted in English, Spanish, Korean, and Vietnamese between April 2000 and March 2001. Bilingual/bicultural interviewers were trained and supervised; at least 10% of each interviewer's calls were monitored directly. Advance letters were sent to hard-to-reach households, and standard refusal conversion processes, including offers of incentives, were used. Additional information about the methods used can be found elsewhere.[14]

The analyses reported here were based on the 542 California adults who completed the interview as part of the cross-sectional statewide random-digit dialing sample. The response rate for the cross-sectional sample, calculated according to the standards published by the American Association of Public Opinion Research with specific minor adjustments, was 47.3%. This response rate is similar to or higher than those of other recent statewide California telephone surveys.[15,16] A total of 20 individuals (3.7% of the sample) did not respond yes or no to the question regarding whether they would support funding for domestic violence prevention programming and

were eliminated from the present analyses, resulting in a final sample of 522 respondents.

Key demographic characteristics of the final sample were roughly comparable to those of the overall population of California adults. For example, 58.2% of the respondents were White (vs 59.5% of the state population),[17] and 28.2% were immigrants (vs 26.2% of the state population).[17] Overall, the sample was 58.2% White, 8.4% Black, 19.0% Latino, 12.6% Asian or Pacific Islander, and 1.7% Native American. The sample involved a wide age range (18–92 years; mean=42.5 years), and most of the respondents (61.9%) were women. A majority of respondents (54.0%) lived in a suburb; 33.9% lived in a city with more than 250 000 residents, and 19.7% lived in a small town or on a farm.

Most of the respondents were involved in a relationship at the time of the survey; 49.8% were married, 10.7% were dating, 5.4% were involved in a serious relationship but not married or cohabitating, 8.4% were living with their partner, and 25.3% were not involved in a relationship. The sample was diverse in terms of education (9.0% had less than a high school education, 22.8% had a high school diploma, 26.8% had completed some college, and 41.2% had graduated from college) and annual household income (of the 446 respondents who reported income information, 14.9% earned less than $20 000, 19.0% earned $20 000–$39 999, 17.2% earned $40 000–$59 999, and 35.8% earned $60 000 or more).

Design

Toward the end of the 27-minute (on average) interview, participants were asked about their support for domestic violence prevention programming. As a means of assessing the acceptability of various revenue-generating strategies, funding methods and dollar amounts were randomized into vignette-style questions. The following, with randomized items shown in italics, is an example of such a question: "Suppose the state of California was going to do more to prevent domestic violence. To make this happen, would you support the idea of *a surcharge on sales of alcohol* that would cost the average California resident who *bought alcohol* about *$10 per year*? The money raised in this way would go to support programs to prevent domestic violence."

TABLE 1—Funding Methods Randomly Assigned to Respondents

Increased fines for batterers . . . was convicted of battering . . . per fine
A surcharge on marriage licenses . . . got married . . . when they got married
A surcharge on sales of alcohol . . . bought alcohol . . . per year
A surcharge on sales of firearms . . . bought firearms . . . per year
A surcharge on sales of ammunition . . . bought ammunition . . . per year
A surcharge on sales of records or CDs with violent lyrics . . . bought records or CDs with violent lyrics . . . per year
A surcharge on admission to or rental of violent movies . . . attended or rented violent movies . . . per year
A surcharge on sales or use of violent video games . . . bought or played violent video games . . . per year
A check-off on your tax return, like there already is for environmental and other causes . . . made the check-off on the tax return . . . per year
A license plate frame with domestic violence prevention slogans . . . bought the license plate frame
Postage stamps, like those sold to raise funds for breast cancer research . . . bought the special postage stamps . . . per year

Funding methods and amounts were assigned randomly and were independent of one another (i.e., a factorial design was used). Table 1 presents the list of funding methods tested. The options for amount of money were $1, $5, $10, and $25 per year (or, when relevant, per transaction, such as amount per marriage license issued).

Statistical Analysis

Frequencies and χ^2 tests were used to describe the key findings. Logistic regression was used to predict respondents' willingness to fund domestic violence prevention programming. Demographic characteristics were taken into consideration in this analysis, as were both funding method and funding amount. Various funding methods were compared with the option involving the most personal responsibility, that is, increased fines for batterers. Amounts of $5, $10, and $25 were compared with $1, the lowest amount tested. Results are shown as percentages and adjusted odds ratios (ORs).

Weights were applied to the sample to adjust for population demographics (i.e., gender and ethnicity) and for methodology issues (i.e., probability of selection within a given household, number of telephone lines, and nonresponse). Analyses were conducted with both unweighted and weighted data, and patterns in the findings were substantively similar in the 2 sets of analyses. Weighted data are presented here as a reasonable approximation of the opinions of adult residents of California.

RESULTS

A substantial majority (79.4%) of Californians supported raising funds for domestic violence prevention efforts. Rates of acceptance of the 11 funding methods ranged from 72.1% (a surcharge on violent video games) to 97.9% (increased fines for batterers). Although the percentage who supported each method differed, acceptability was generally high: 9 of the 11 methods were rated at 75% or above. Also, more than 75% supported each of the 4 tested funding amounts. Acceptability rates dropped as amounts increased: 86.1% for $1, 81.1% for $5, 75.8% for $10, and 75.3% for $25. The percentages responding affirmatively according to funding method and funding amount are shown in Table 2.

Logistic regression analyses indicated that men were substantially less likely than women to support the idea of funding domestic violence prevention programming, regardless of method or amount (adjusted OR=0.46; 95% confidence interval [CI]=0.25, 0.88; $P<.018$). Californians born outside the United States (adjusted OR=5.10; 95% CI=1.78, 14.61; $P<.002$), those who had attended but not completed college (adjusted OR=3.27; 95% CI=1.46, 7.30; $P<.004$), those who had graduated from college (adjusted OR=2.31; 95% CI=1.08, 4.95; $P<.032$), and those who had school-aged children living at home (adjusted OR=2.50;

TABLE 2—Support for Domestic Violence Prevention Programming, by Funding Method and Amount

Funding Method	Amount, %				
	Overall	$1	$5	$10	$25
Overall	79.4	86.1	81.1	75.8	75.3
Increased fines for batterers	87.1	91.9	90.7	76.1	87.7
Marriage license surcharge	86.8	92.0	97.5	80.0	70.1
Alcohol sales surcharge	77.3	75.8	85.7	88.3	58.8
Firearms sales surcharge	86.4	100.0	77.0	90.8	80.5
Ammunition sales surcharge	71.6	82.4	68.2	57.5	85.0
Surcharge on violent records or CDs	74.2	88.1	63.6	71.2	76.3
Violent movie surcharge	75.5	79.7	77.2	76.7	70.8
Violent video game surcharge	72.1	100.0	68.2	43.6	77.5
Check-off on tax return	78.1	55.7	80.2	85.4	89.7
License plate frame	75.2	85.1	97.2	72.5	56.7
Postage stamps about domestic violence	97.9	100.0	100.0	100.0	82.0

Note. Weighted data are shown.

95% CI=1.07, 5.85; $P<.035$) were more likely to support funding for domestic violence prevention efforts. (Comparison groups were US-born individuals, those who had graduated from high school, and those without school-aged children living at home, respectively.) Aside from these few findings, demographic characteristics were not statistically related to willingness to fund domestic violence prevention programs.

TABLE 3—Odds Ratios of Support for Domestic Violence Programming, by Funding Methods and Amounts

	Adjusted Odds Ratio	95% Confidence Interval
Funding method (vs increased fine for batterers)[a]		
Marriage license surcharge	0.97	0.79, 1.20
Alcohol sales surcharge	0.46	0.10, 2.11
Firearm sales surcharge	0.87	0.45, 1.71
Ammunition sales surcharge	0.66	0.42, 1.04
Surcharge on violent records or CDs	0.83	0.57. 1.19
Violent movie sale and rental surcharge	0.83	0.64, 1.08
Violent video game sales surcharge	0.75	0.60, 0.94
License plate frame sales	0.90	0.78, 1.04
Income tax check-off	0.97	0.83, 1.14
Postage stamps about domestic violence	1.20	0.99, 1.45
Amount (vs $1)[b]		
$5	0.76	0.46, 1.25
$10	0.70	0.51, 0.96
$25	0.77	0.61, 0.97

Note. Demographic characteristics (e.g., gender, age, ethnicity, nativity, education, employment and relationship status) and the variables shown (i.e., funding method and amount) were taken into account in the logistic regression. Weighted data were used in the analysis.
[a]Increased fines for batterers constituted the comparison group.
[b]The comparison group was $1.

Independent of demographic characteristics and funding amount, support was statistically similar for increased fines for batterers; a surcharge on marriage licenses; a surcharge on sales of alcohol, firearms, ammunition, and records and CDs with violent lyrics; a surcharge on sales and rentals of violent movies; sales of a license plate frame containing domestic violence prevention messages; a check box on the state income tax form; and sales of special postage stamps such as those used to raise funds for breast cancer research (see Table 3). Californians were less likely to support a surcharge on sales of violent video games (adjusted OR=0.75, $P<.014$) than to support increased fines for batterers. Amounts of $1 and $5 were equally acceptable; support for $10 and $25 was not as acceptable, regardless of the basis of the assessment.

DISCUSSION

Funding for public health activities is an ongoing concern, yet basic information about the financing of public health services is limited. In marked contrast to the extensive literature on health care financing, there are no books and few scholarly journal articles focusing on the financial structure of public health services.[3] Research on public health service expenditures is difficult because there is no system for gathering information either comprehensively or longitudinally.[3] Substantial changes in the US public health system are needed[4]; in the meantime, states will continue to provide essential public health services.

Some advocate for substantial increases in general fund allocations, whereas others argue for special levies to support both essential and specialized programs and services. Regressive taxes, in turn, are criticized because the funding base can be less stable than general fund allocations and because costs are shifted to individuals who are less able to pay the additional tax. Furthermore, special levies to fund programs and services can be perceived as an overt acknowledgment that the effort in question is perceived as nonessential, a point of understandable controversy.

Regressive taxes nonetheless fund substantial public health efforts (e.g., special taxes on

tobacco have been used to fund anti-tobacco health campaigns), and their expansion is considered from time to time (e.g., a special alcohol tax to fund trauma center care). Policymakers and the public alike sometimes perceive these taxes, often portrayed as "user fees," as more fair than other types of taxes in that those who create the need for a service are thought to be responsible for paying for it.

Few population groups, according to the present findings, would oppose assessment of surcharges or other methods by which to generate revenue for domestic violence prevention. Only 1 demographic group—men—is less likely to support funding for domestic violence prevention programming. Men's lower levels of support held even when other demographic characteristics were taken into account (however, bivariate data indicated that rates of support among both men and women were quite high [74.8% and 83.8%, respectively]). It remains to be seen how this finding might apply to the actions of policymakers, the majority of whom are male and who have the power to generate population-wide revenues. A few demographic characteristics were associated with increased support, namely, having school-aged children living at home, having attended or completed college, and being an immigrant.

Funding Intimate Partner Violence Prevention Activities

The federal government plays a crucial role in public health through the enactment of legislation that creates, authorizes, and funds programs.[18] In 2001, the Centers for Disease Control and Prevention (CDC) distributed $42 million to every US state and territory to fund rape prevention and education activities (Corinne Graffunder, National Center for Injury Prevention and Control, CDC, oral communication, December 2002). These funds comprise about one half of the injury prevention and control budget of the California Department of Health Services (CDHS) (Alex Kelter, Epidemiology and Prevention for Injury Control Branch, CDHS, oral communication, December 2002). Although there are obvious commonalities between sexual assault (about half of rapes of women are committed by a current or former male intimate[10]) and domestic violence, funding streams, program activities, and research studies have largely been categorical, generally treating these 2 forms of violence as if they do not overlap or coexist.

Currently, about $5 million within the CDHS budget is focused on broadly defined domestic violence prevention activities (e.g., training judges, developing culturally competent outreach services, working with faith communities). This includes about $3.7 million of the nearly $24 million allocated from the state's general fund for services for battered women (MaryLynn Fatheree, Domestic Violence Unit, CDHS, oral communication, December 2002). The latter amount is part of the approximately $700 million allocated to public health within the overall CDHS budget of $28 billion. The $5 million spent on domestic violence prevention includes about $1.6 million in federal dollars (Alex Kelter, Epidemiology and Prevention for Injury Control Branch, oral communication, December 2002). In fiscal year 2001–2002, the CDC allocated about $8 million to 34 projects across the nation (i.e., culturally competent demonstration grants, coordinated community response evaluations, and planning and implementation grants; Corinne Graffunder, National Center for Injury Prevention and Control, CDC, oral communication, December 2002). Although the need for improved services is great, these state and federal efforts appear to focus largely on secondary and tertiary prevention activities. If public health is to fulfill its mission of increasing the health of all, additional resources will be necessary for primary prevention activities.

More than half of the basic $34 marriage license fee in California is used to support battered women's shelters in the state. Considering that 224 241 marriages took place in California in 2001,[19] about a quarter of a million dollars would be generated for domestic violence prevention programming if a $1 surcharge were added to each marriage license issued in the state. Moreover, based on state firearm sales data for 2001, a year in which handgun sales in California were the lowest since these data were first recorded in 1972, at least $350 000 would be raised each year by a $1 surcharge on all firearm purchases in the state.[20] If $5 surcharges were levied, more than $1 million each year would be generated by marriage licenses, and about $1.75 million would be generated by firearm sales.

Whereas a $1 or $5 fee increase is not inconsequential, it is worth noting that individual counties can and do increase basic fees from time to time; for example, California's basic $34 marriage license fee, but marriage license fees are $39 in San Joaquin County and $78 in San Mateo County. The fee associated with purchasing a firearm in California in 2003 is $45; fees have been increased $10 since 2001 to cover costs associated with a new state law requiring handgun buyers to pass both a written test and a proficiency test. Thus, fees are increased, sometimes at a substantial proportion of their base rate.

Methodological Considerations

In the present research, the survey questions regarding funding of domestic violence prevention programs were posed within the context of a study of social norms regarding domestic violence. Responses therefore may be subject to social desirability or to a bias created by concentrating on the 1 topic that could result in overestimates of the outcomes. As a result, it would be advisable for health departments and legislatures seeking to generate funds for domestic violence prevention programming to focus on the rankings of various funding methods and amounts rather than the absolute percentages.

Another consideration is the reduced willingness of the general public to participate in scientific surveys. Participation rates in telephone surveys have dropped over the years; from 1995 to 1999 alone, response rate estimates for the national Behavior Risk Factor Surveillance System (BRFSS) survey fell 14.5% to 20.5%, depending on the method used to calculate the response rate.[21] According to the widely accepted CASRO method, BRFSS response rates dropped from a median of 68.4% in 1995 to 55.2% in 1999; in 1999, 18 states had participation rates below 50%.[21]

Technological changes (i.e., caller identification and call blocking, the latter of which prevents a telephone call from ringing through), along with frustration with sales calls masked as scientific surveys, may be re-

lated to the drop in survey response rates across the nation. As a means of dealing with this challenge in the present study, the National Opinion Research Center sent letters to nonresponding households. Moreover, Californians appear to value their privacy, as evidenced by the fact that much of today's consumer privacy legislation originated in California.

In addition, the issue of language eligibility is relevant in the case of community-based surveys conducted in states such as California, where about one fourth of the population is foreign born and many residents do not speak English.[22] Individuals who do not meet language eligibility requirements cannot be screened out, and thus they remain part of the denominator when participation rates are calculated. If monolingual speakers of Cantonese, Japanese, Tagalog, and so forth could have been screened out of the present study, the response rate probably would have been somewhat higher. Given the considerations identified in the preceding paragraphs and the fact that the data were collected by the National Opinion Research Center, arguably the best telephone survey research firm in the nation, I believe that the response rate obtained in this study is probably among the best that can currently be obtained in California with a multilingual sample. Moreover, it is important to note that, when analyses were conducted with both unweighted and weighted (to compensate for design and demographic factors) data, patterns in the findings were substantively similar.

Conclusions

Californians are willing to pay for domestic violence prevention programming through a variety of funding methods, including "user fees" and humanitarian "donations." Only one of the tested methods, a surcharge on the sale of violent video games, was statistically less acceptable than increased fines levied against individuals convicted of battering. Amounts of $1 and $5 were most acceptable; however, from a substantive perspective, $10 and $25 were similarly acceptable. The findings described here are relevant to those seeking to increase domestic violence prevention efforts.

Although the link between violence and the economy has been difficult to assess scientifically, one can reasonably expect that domestic violence will not decrease substantially in the near future. The present findings indicate that a wide range of options are available to policymakers through which to generate relatively consistent state-level funding for domestic violence prevention programming, useful information in any economy. ■

About the Author

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Human Participant Protection

This research was reviewed and approved by the institutional review boards of the University of California, Los Angeles and the National Opinion Research Center, University of Chicago. Informed consent was obtained by telephone from all participants who were interviewed.

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