Substance Abuse Treatment Produces Savings in South Dakota

Presented to: Division of Alcohol and Drug Abuse
State of South Dakota

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Child Welfare Impact

Substance abuse has a major impact on the child welfare system in this country. It is estimated that nearly one-tenth (9 percent) of children live with at least one parent who abuses alcohol or other drugs.[1]

Children of substance abusing parents often have multiple problems and are more likely to have poorer physical, intellectual, social, and emotional outcomes and are at greater risk of developing substance abuse problems themselves.[2] Data indicate that abused or neglected children from substance abusing families are more likely to be placed in foster care and are more likely to remain there longer than maltreated children from non-substance abusing families.[3]

Studies have shown varying results, but between one-third and two-thirds of child maltreatment cases involve substance abuse.[4] In a recent survey by the National Center on Child Abuse Prevention Research, many (85 percent of States) reported that substance abuse was one of the two major problems exhibited by families in which maltreatment was suspected.[5]

One study estimated that of the more than $24 billion States spend to address different aspects of substance abuse, $5.3 billion (slightly more than 20 percent) goes to child welfare costs related to substance abuse.[6]

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[1] Office of Applied Studies. (2003). *Children living with substance-abusing or substance-dependent parents*. Rockville, MD: Substance Abuse and Mental Health Services Administration. (http://www.DrugAbuseStatistics.samhsa.gov)

[2] U.S. Department of Health and Human Services. (1999). *Blending perspectives and building common ground: A report to Congress on substance abuse and child protection*. Washington, DC: U.S. Government Printing Office.

[3] U.S. Department of Health and Human Services. (1999). *Blending perspectives and building common ground: A report to Congress on substance abuse and child protection*. Washington, DC: U.S. Government Printing Office.

[4] U.S. Department of Health and Human Services. (1999). *Blending perspectives and building common ground: A report to Congress on substance abuse and child protection*. Washington, DC: U.S. Government Printing Office.

[5] National Center on Child Abuse Prevention Research. (2001). *Current trends in child abuse prevention, reporting, and fatalities: The 1999 fifty state survey*. Chicago: Prevent Child Abuse America.

[6] National Center on Addiction and Substance Abuse at Columbia University. (2001). *Shoveling up: The impact of substance abuse on state budgets*. New York: Author. (http://www.casacolumbia.org/absolutenm/templates/articles.asp?articleid=239&zoneid=31)

Although much public attention has focused on the cost of public assistance (the former AFDC program), child welfare is a more expensive governmental activity and more complicated. In 1995, the federal government spent about $11,698 per child in foster care, whereas it spent only $1,012 for each person receiving welfare benefits. When factoring in state costs, the average cost increases even further to $21,092 per child in foster care versus $2,499 for each person receiving a welfare check.[7]

In South Dakota in 2005, there was a minimum of 110 children placed in foster care due to their parents' involvement in meth. The average length of stay for children discharged from foster care in Fiscal Year 2005 was 12.8 months.[8] The estimated cost of foster care for the 110 children for one year would be at least $2,320,120 (110 times $21,092). Based on the treatment effectiveness (36.3 percent abstinent at 12 months post treatment) of meth clients in South Dakota, treatment saves about $842,204 (.363 times $2,320,120) per year. In the future, information on all children placed in foster care because of substance abuse of parents will be available. At present, information is only available for children placed in foster care because of meth issues of parents.

Overall Cost Benefit Ratio of Treatment

In South Dakota substance abuse treatment cost averages about $1,382 per client, but the benefits is much higher ($11,653), resulting in a very favorable cost-benefit ratio of $8.43 for every dollar invested.[9]

Law Enforcement Costs

In considering the indigent clients obtaining treatment funded by the Division of Alcohol and Drug Abuse in South Dakota, the law enforcement costs add to the overall expense to society, because of the high arrest rate of persons with substance abuse problems. Before treatment 75 percent of the clients had been arrested with an average of 1.4 arrests per person, but the percent of clients arrested during the year post treatment was significantly less at 18.5 percent with an average of 0.3 arrests per person. The cost per arrest ($2,362) was determined by dividing the estimated cost of operating police and/or sheriff's offices in South Dakota in 2002 by the number of persons arrested in South Dakota in 2002. The arrest costs would include all facets of local law enforcement, including the cost of operating local jails, if applicable.[10]

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[7] The Future of Children PROTECTING CHILDREN FROM ABUSE AND NEGLECT Vol. 8 • No. 1 – Spring 1998.

[8] Child Protection Services, South Dakota's Department of Social Services, 2005.

[9] Outcome Studies for Substance Abuse Programs funded by the Division of Alcohol and Drug Abuse. Report by Mountain Plains Research, December 2004.

[10] Outcome Studies for Substance Abuse Programs funded by the Division of Alcohol and Drug Abuse. Report by Mountain Plains Research, December 2004.

Calculation of benefit: criminal justice cost per person before treatment was $3,307 (1.4 arrests times $2,362) and cost after treatment was $709 (.3 arrests times $2,362), resulting in a savings of $2,598,000 ($3307-$709 times 1000) per year.

Healthcare Impact

Before treatment clients from programs financed by the Division of Alcohol and Drug Abuse report an average of 3.3 days of hospitalization per year. After treatment, the number of days per year is much less at 1.5 days per year. [11] Based on $968 per day [12] for hospitalization costs treatment results in the savings of $1,742.40 (1.8 days reduction times $968) per client per year. For 1000 clients, the savings realized is $1,742,400 ($1472.40 times 1000).

Recovering People Work

Job Productivity Impact

In considering the clients provided treatment under the auspices of the Division of Alcohol and Drug Abuse, substantial employment benefit is realized. Before treatment (based on more than 1000 persons followed 12 months after treatment), about two-thirds (66.7%) of the clients were employed. Twelve months post treatment a much higher percent (90.9%) was employed. In estimating the benefits per person, the percent employed for each time period was multiplied times the theoretical annual salary of $20,000. The median household income in 2000 in South Dakota was actually $34,840,[13] but the $20,000 income figure is used in this calculation. Based on $20,000 per year salary, program participants make $4840 more per year after treatment than before, resulting in $4,840,000 (1000 who complete treatment times $4840) additional wages during the first year after completing treatment.[14]

Spending for Substance Abuse in South Dakota

In one study, for every $100 South Dakota spends on substance abuse, $2.92 was spent on Prevention, Treatment, and Research, while $97.08 was spent on fixings the effects of substance abuse. The burden of substance abuse on the state is about 10.6% of the budget or about $125,216,000.[15] These costs to the state include: justice system,

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[11] Outcome Studies for Substance Abuse Programs funded by the Division of Alcohol and Drug Abuse. Report by Mountain Plains Research, December 2004.

[12] 1997 Statistical Abstract of the United States, citing data from the American Hospital Association, Chicago IL, Hospital Statistics, annual editions.

[13] U.S. Census Bureau, Demographic Surveys Division, Continuous Measurement Office, 2002.

[14] Outcome Studies for Substance Abuse Programs funded by the Division of Alcohol and Drug Abuse. Report by Mountain Plains Research, December 2004.

[15] National Center on Addiction and Substance Abuse at Columbia University. (2001). *Shoveling up: The impact of substance abuse on state budgets*. New York: http://66.135.34.236/pdshopprov/files/47299a.pdf

education, health, child/family assistance, mental health/developmental disabilities, public safety, and cost to the state of administering the various programs.

Working People Pay Taxes

Economic Impact

In a follow-up study of 1000 individuals in community-based treatment in South Dakota between 1998 and 2004, 499 persons were working full-time before treatment. After treatment, 677 were employed full-time, an increase of 178 persons.[16] If these 178 persons averaged $10.00/hour over a year, the amount of taxes paid to society would be substantial considering the total income of $3,702,400 (178 times $20,800). Assuming these people would pay at least 10 percent of income in federal and local taxes, the amount of taxes paid would be $370,240 per year ($3,702,400 times .10).

Prevention Works to Promote Healthy Citizens

Economic Impact

Research-based prevention programs can be cost-effective. Similar to earlier research, recent research shows that for each dollar invested in prevention, a savings of up to $10 in treatment for alcohol or other substance abuse can be seen.[17] [18] [19] [20]

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[16] Outcome Studies for Substance Abuse Programs funded by the Division of Alcohol and Drug Abuse. Report by Mountain Plains Research, December 2004.

[17] Pentz, M.A. Costs, benefits, and cost-effectiveness of comprehensive drug abuse prevention. In: Bukoski, W.J., and Evans, R.I., eds. Cost-Benefit/Cost-Effectiveness Research of Drug Abuse Prevention: Implications for Programming and Policy. NIDA Research Monograph No. 176. Washington, DC: U.S. Government Printing Office, pp. 111–129,1998.

[18] Hawkins, J.D.; Catalano, R.F.; Kosterman, R.; Abbott, R.; and Hill, K.G. Preventing adolescent health-risk behaviors by strengthening protection during childhood. Archives of Pediatric and Adolescent Medicine 153:226–234, 1999.

[19] Aos, S.; Phipps, P.; Barnoski, R.; and Lieb, R. The Comparative Costs and Benefits of Programs to Reduce Crime. Vol. 4 (1-05-1201). Olympia, WA: Washington State Institute for Public Policy, May 2001.

[20] Spoth, R.; Guyull, M.; and Day, S. Universal family-focused interventions in alcohol-use disorder prevention: Cost effectiveness and cost-benefit analyses of two interventions. Journal of Studies on Alcohol 63:219–228, 2002.