MONTANA WOMEN'S PRISON

ANALYSIS OF THE IMPACT OF TREATMENT PROGRAMS ON INMATE MISCONDUCT AND RECIDIVISM

MEDICINE WHEEL CHEMICAL DEPENDENCY
&
ANGER MANAGEMENT TREATMENT

The University of Montana-Missoula

Montana Women's Prison Memorandum

TO: **All Concerned**

FROM: **MWP Warden Jo Acton**

SUBJECT: **U of M Review of Medicine Wheel and Anger Management Treatment
                Programs**

DATE: **September 2, 2004**

        Early in 2002, the DOC Advisory Council adopted a formal definition of prison
recidivism. This process initiated discussions regarding the reasons for recidivism and
whether returns were impacted by treatment programming in the prisons. However,
recidivism does not accurately correlate with treatment success. An individual may commit
a crime, but successfully maintained sobriety.

        A contract was developed with the University of Montana to evaluate not only
recidivism, but also treatment impact on the security of the institution and how it affects
inmate behaviors while they are incarcerated.

        The results of this evaluation follow and confirm correctional staff members'
contention that treatment contributes to the safety and security of the institution and
positively impacts the behavior of the inmates. Administration and treatment personnel
were not involved in the study. Results are based solely on objective data secured from
inmate files.

        Provision of treatment is a vital component in the security of the institution and is a
major element in interrupting the criminal lifestyle.

Medicine Wheel and Anger Management Treatment in Montana Women's Prison:
An Analysis of the Impact of Treatment on Inmate Misconduct and Recidivism

Dusten R. Hollist, Ph.D.
James W. Burfeind, Ph.D.
Daniel P. Doyle, Ph.D.
Jessica A. Conrad
Dana L. Price
Darby A. Kaikkonen
Danielle A. Soto
The University of Montana-Missoula

Executive Summary

The purpose of this research is to examine the effectiveness of two therapeutic treatment programs currently available at the Montana Women's Prison (MWP): Medicine Wheel (MW), a Native American based chemical dependency program, and Anger Management (AM) treatment. Program effectiveness is measured using the rate of inmate misconduct while in MWP and the three-year recidivism rate of released inmates. The study was designed to allow for the comparison of misconduct rates before and after treatment and the comparison of after-treatment misconduct rates of those completing treatment and those not completing treatment. The study design also allows for the comparison of the recidivism rates of those who did or did not complete treatment.

Major findings:

Medicine Wheel (MW)

- The vast majority of inmates (94.1%) had a prior arrest. More than half (66.7%) had served time in jail or prison as a result of a prior arrest.

- Among those completing MW treatment, the percentage of inmates with conduct violations decreased after treatment.

- Inmates who completed MW treatment had lower rates of recidivism than those in the comparable non-treatment group.

- Native American inmates seem to benefit more from MW treatment.

- Among those in the MW sample, younger inmates are more likely to return to prison.

Anger Management (AM)

- All of the 20 inmates had a prior arrest. Most (70.0%) had served time in jail as a result of a prior arrest

- The rate of misconduct for inmates who completed AM treatment is significantly lower after treatment.

- Of those inmates completing AM treatment, about three times as many showed a reduction in their misconduct rate rather than an increase after treatment.

- Inmates who complete AM treatment have lower after-treatment rates of misconduct compared to inmates who do not receive treatment.

- Inmates who completed AM treatment had lower rates of recidivism than those in the comparable non-treatment group.

- Among those in the AM sample, Native American inmates are the most likely to return to prison.

The analyses of programs contained in the pages that follow, were conducted exclusively by researchers in The University of Montana, Department of Sociology. The researchers were employed as independent contractors to The State of Montana, Department of Corrections and did not solicit nor receive input from any member of the Montana State Women's Prison treatment staff, administration, or the warden.

Introduction

There is considerable debate regarding the effectiveness of therapeutic treatment in prisons. Although considerable time and money is devoted to treatment programs, a clear consensus regarding the effectiveness of these programs has not emerged. The purpose of this study is to evaluate the effect that treatment received during an inmates stay at Montana Women's Prison (MWP) in Billings, Montana has on the institutional conduct of inmates while they are incarcerated and the rate at which they return to prison during the period of three years following release.

Our investigation examines two therapeutic treatment programs offered at MWP: Medicine Wheel (MW) and Anger Management (AM) treatment. Both of these programs are offered in a group setting where inmates--who go through the program together in cohorts--interact with one another and correctional staff as they progress. Each of the inmates included in the analysis were scheduled to receive treatment--either MW or AM--during the period of their confinement at the MWP.

This document is presented in two sections- one devoted to MW and the other to AM treatment. Each section begins with the background of the program that is being evaluated, providing the reader with a glance into the "what and how" of the treatment program. This is followed by a brief review of the prior research that has been conducted on the program. The third part of each section outlines the methodology of the study. The analysis evaluating the impact of treatment on inmate conduct follows. The document concludes with a discussion of the findings and their implications.

Medicine Wheel Treatment

Background

The MW treatment program at Montana Women's prison is a 12-step chemical dependency program emphasizing a Native American perspective. To complete the program, inmates are required to participate in and complete 16 sessions of treatment. Within these sessions they are required to progress through all 12 steps of the program. The 12 steps are completed through a combination of written exercises and group discussions. Inmates who complete the program are issued a completion certificate.

The Indian Twelve Steps: Walking the Red Road is a major focus of the program. Each of the steps is accompanied by a key principle. The twelve steps begin with an inmate admitting that they are powerless over their addiction (honesty). The final step is a pledge to help others struggling with addiction (service). The primary goal of the program is to provide inmates with a deeper understanding of the 12-step recovery process and to assist them in developing a personal recovery program. Upon completion, participants are expected to have an increased ability to define the 12-step recovery process, apply the major concepts of the program, and define and utilize the 12-steps to develop a personal recovery plan.

Prior Research

"The objective of the Medicine Wheel Treatment Program is to provide culturally relevant treatment, activities and services to Indian prisoners by culturally competent prison staff" (Ada et al. 2000:35). The treatment program is based on *The Red Road to Wellbriety: In the Native American Way*, a program similar in nature to Alcoholics Anonymous, yet encompassing the history and culture of Native American people (White Bison 2002). Wellbriety offers a naturalistic and holistic approach to chemical dependency treatment by emphasizing the circular and cyclical nature of life and the healing powers that can be drawn from a life that is in harmony with such patterns--thus, the name Medicine Wheel. The four polar directions of east, south, west, and north, are connected to the four seasons, the cycles of life (birth, youth, adulthood, and old age), the primary social sectors (self, family, community, and nation), and to the symbolic color of many races. The east is associated with infanthood, spring, emotional growth, the color red, and the individual. South is connected with youth, summer, mental growth, yellow, and family. West envisions adulthood, fall, physical growth, black, and community; North is related with the elders, winter, spiritual growth, the color white, and the nation. For the purpose of chemical dependency treatment, Alcoholic Anonymous' 12-step recovery process is adapted to this medicine wheel philosophy, in what is called "The Medicine Wheel and the 12 Steps (MW-12)"(White Bison). The 12 steps emphasize change in character and values, drawing on "four laws of change:" 1) Change comes from within. 2) In order for development to occur, it must be preceded by a vision. 3) A great learning must occur. 4) You must create a healing forest (White Bison).

While the present study focuses on the Medicine Wheel Treatment Program at the Montana State Women's Prison, an earlier study of Medicine Wheel at the Montana State Men's Prison gives promise of success (Ada et al. 2000). Preliminary outcome measures were reported in a document published by the Office of Justice Programs, entitled "Promising Practices and Strategies to Reduce Alcohol and Substance Abuse Among American Indians and Alaska Natives" (Ada et al. 2000). However, the data reported were in terms of all inmates who successfully completed some form of chemical dependency treatment, not just Medicine Wheel. Native American participation in chemical dependency treatment increased during the period of study—implicit here is that this increase was due to an expanding and popular Medicine Wheel Program. Of the inmates discharged from prison after successfully completing treatment in each of the two years studied, the vast majority reported no drug usage after six months and again after one year; only a very small portion of the sample reported re-arrest or parole violation. Since Medicine Wheel constitutes a portion of the prison's chemical dependency program, some of the reported success can be attributed to Indian inmates who successfully completed the Medicine Wheel program.

Methodology[1]

All inmates included in the sample were scheduled to receive MW treatment during their stay at MWP. Any inmate who was scheduled to receive MW treatment during the fiscal years of 2001-2003 was eligible for inclusion in the misconduct sample. Any inmate who was scheduled to receive MW treatment during their prison term and was released during or prior to fiscal year 2003 was eligible for inclusion in the recidivism sample.

Eligible inmates were identified by A0 number and placed into a sampling pool. The researchers were able to identify and obtain information on 36 inmates for the misconduct investigation and 23 inmates for the recidivism study. The inmates included in the study then represent all inmates who were scheduled to receive medicine wheel treatment at MWP during the study periods mentioned in the previous paragraph.

Misconduct[2]

Sample

Of the 36 inmates in the sample, the majority are White women (57.1%); although Native American women comprise a large portion of the sample (40.0%). The remainder of the sample (2.9%) is comprised of Hispanic women. At the time of entry to prison, the average age of the inmates in the sample was just over 33 years (Appendix Table 1).

The average sentence length received by the offenders was 92.7 months (Appendix Table 2). Suspended sentences were given to 28 of the 36 inmates. The average length of sentence suspended was approximately 65 percent of the sentence length (60 months). The vast majority of the inmates (94.1%) had a prior arrest. More than half (66.7%) had served time in jail or prison as a result of a prior arrest (appendix Table 3).

Of the 36 inmates in the sample, 21 (58.3%) had completed MW treatment at the time of the study. An additional 15 (41.7%) inmates had not completed MW treatment.[3]

---

[1] An inmate is viewed as a viable candidate for the recidivism study if they have been released from prison for at least three years. Inmates transferred to regional prisons or to pre-release centers from Montana Women's Prison are included only if they were discharged from DOC custody and released into the community three years prior to March 15th 2004.

[2] Misconduct rates are generated by taking the number of misconducts each inmate received during their stay in prison divided by the total number of months the inmate spent in prison. This sum is then multiplied by 12 to produce annual misconduct rates.

[3] Many of the inmates classified as "non-treatment" will have completed at least some chemical dependency treatment either while under the supervision of the Montana Department of Corrections or in another context. Only inmates who completed MW at MWP are considered part of the treatment group.

Total, severe, and major misconduct

Table 1. Total, Severe, and Major Misconduct of Incarcerated Inmates
Eligible for Medicine Wheel Treatment Between 2001-2003

Conduct Type	All		Mean	Rate
Total Misconduct			**Mean**	**Rate**
0	55.6%	(20)	1.83	.93
1-3	27.8	(10)		
4-7	11.1	(4)		
8-10	***			
More than 10	5.6	(2)		
Severe Misconduct			**Mean**	**Rate**
0	75.0%	(27)	.86	.43
1-3	11.1	(4)		
4-7	11.1	(4)		
8-10	2.8	(1)		
More than 10	***			
Major Misconduct			**Mean**	**Rate**
0	63.9%	(23)	.97	.50
1-3	30.6	(11)		
4-7	2.8	(1)		
8-10	***			
More than 10	2.8	(1)		

Note: Data represent all 36 inmates in the sample.
      Counts are shown in parentheses.

Misconduct at MWP is classified as severe, major, or minor. Severe misconduct includes the most serious breaches of MSP rules (eg.: assault, substance abuse, theft of property worth more than $50). Major misconduct involves somewhat less serious violations (eg.: bribery, organizing gambling, theft of property worth between $10 and $50). Minor misconduct includes even less serious violations (eg.: insolence towards a staff member; participating in gambling, theft of property worth less than $10).

Misconduct in the sample is rare. The 36 inmates were cited for a total of 42 misconduct violations. Of these, there were a total of 21 severe violations and 21 major conduct violations.[4] Table 1 shows that over half (55.6%) of the inmates scheduled to receive

---

[4] Severe violations are more serious than major violations.

AM treatment had clear conduct and were never cited for any violations during their stay in prison. Most (83.4%) percent had three or fewer total misconduct violations.

A small percentage of the inmates in the sample (5.6%) were cited for more than 10 total conduct violations. Both of the inmates in the sample with more than 10 misconduct violations had completed medicine wheel treatment during their stay in prison. The inmates averaged just less than two total misconducts. The total misconduct rate was .93.

Three-fourths of the inmates made it through their prison term without being cited for a severe misconduct violation. The majority (86.1%) had three or fewer severe conduct violations. None of the inmates were cited for more than 10 severe misconducts. The inmates averaged less than one severe violation. The overall severe misconduct rate was .43.

Of the 36 inmates in the analysis, 63.9 percent left prison without being cited for a major misconduct violation. Almost all (94.5%) had three or fewer misconducts while incarcerated. A single inmate had more than 10 severe misconducts. The inmates averaged less than one major violation. The overall major conduct rate was .50.

Rate of misconduct before and after treatment

As noted in the discussion of total, severe, and major misconduct, conduct violations of any kind are rare in the sample. More than half of the inmates were never cited for any misconduct. Of the 16 inmates that were cited for misconduct 10 had three or fewer misconducts and four were cited for 4-7 total misconducts.

Unfortunately, the two inmates cited with more than 10 total violations dominate the rates of misconduct, making it difficult to draw conclusions about the impact of MW treatment on the sample as a whole. These two inmates were cited for 32 of the 42 total conduct violations recorded, 15 of the 21 severe misconducts, and 17 of the 21 major conduct violations. Furthermore, the majority of this misconduct (27 of the 32 total counts) occurred after the inmates completed treatment. As a result, the misconduct rates appear substantially higher for the women in the sample after treatment than they are before.

Percentage of inmates with misconduct before and after treatment

Table 2. Before and After Treatment Misconduct Percentages of Incarcerated
Inmates Eligible for Medicine Wheel Treatment Between 2001-2003

| | Percentage of inmates with conduct violations | | | |
Conduct Violations	% Before Treatment	% After Treatment	Difference (A-B)	% Change
Treatment misconduct for-				
Any violation	28.6% (6)	19.0% (4)	-9.6%	-33.6%
A severe conduct violation	9.5 (2)	19.0 (4)	9.5	50.0
A major violation	23.8 (5)	14.3 (3)	-9.5	-39.9
Inmate on inmate attack	4.8 (1)	9.5 (2)	4.7	100.0

Note: Counts are shown in parentheses.

Another approach to tracking the impact of MW treatment on inmate misconduct it to examine the percentage of inmates cited for a violation before and after treatment. This is shown in Table 2. After treatment, the percentage of inmates cited for any violation dropped by 33.6% and the percentage of inmates cited for major violations dropped by 33.9%. The percentage cited for severe conduct violations and inmate on inmate attacks increases after treatment, but this is based on very few incidents. As the inmates spent nearly equal amounts of time in prison before (14.7 months) and after treatment (14.1 months), the percentages and counts reported are not influenced by differing levels of time served before and after treatment.

Recidivism

Another way of measuring program effectiveness is to examine recidivism. According to the definition used by the Montana Department of Corrections, a recidivism rate is the percentage of inmates who return to prison for any reason within three years of release.

Sample

Of the 23 inmates in the sample, the majority are White (47.8%) and Native American (47.8%). The remaining 4.3 percent represents the only black inmate in the sample. At the time of release from prison, the average age of the inmates was just under 35 years (Appendix Table 4).

The average sentence length was approximately 104.1 months (Appendix Table 5). Suspended sentences were given to 12 of the 24 inmates. The average length of sentence suspended was approximately 50% of the sentence (52.5 months). The vast majority of

the inmates (92.3%) had a prior arrest. Most (69.9%) had served time in jail or prison as a result of a prior arrest (Appendix Table 6).

Of the 23 inmates in the sample, 17 (73.9%) had completed MW treatment at the time of the study. The remaining 6 inmates (26.1%) had not completed MW treatment.

Recidivism rates

Table 3. Recidivism rates of Inmates Eligible for Medicine Wheel Treatment Released From Prison Before 2001			
Recidivism Measure	All	Treatment	Non-Treatment
Within three years following release percentage returned to prison for-			
Any offense	22.7% (5)	17.6% (3)	40.0% (2)
Note: Counts are shown in parentheses.			

Table 3 shows that inmates who completed MW treatment had lower rates of recidivism than those who did not complete treatment. Of the 23 inmates in the sample, 5 (22.7%) returned to prison within three years of release.[5] Inmates in the treatment group (17.6%) were less likely to return to prison for any offense than non-treatment inmates (40.0%). Three of the 17 treatment inmates returned compared to two of the six non-treatment inmates.

---

[5] In the case that an inmate was returned to prison more than once in the three years after the release closest to treatment, they were counted only once in the generation of the recidivism rates.

Recidivism rates by time served prior to release, race, age at release, and time between release and return to prison

Table 4. Recidivism Rate of Inmates Eligible for Medicine Wheel Treatment by Time Served, Race, Age at Release, and Time to Return to Prison						
	Percent returned to prison for any type of crime within 3 years					
	All		Treatment		Non-Treatment	
Time served in prison before release						
12 months or less	16.7%	(1)	16.7%	(1)	***	
13-36	12.5	(1)	14.3	(1)	***	
37-60	75.0	(3)	50.0	(1)	100.0	(2)
61 months or more	***		***		***	
Race						
White	36.4%	(4)	28.6%	(2)	50.0%	(2)
Native American	10.0	(1)	11.1	(1)	***	
Black	***		***		***	
Age at release						
18-29	42.9%	(3)	20.0%	(1)	100.0	(2)
30-39	25.0	(2)	33.3	(2)	***	
40-49	***		***		***	
50 or Older	***		***		***	
Returned to prison for any offense within						
6 months	50.0%	(2)	66.7%	(2)	***	
1 Year	50.0	(2)	33.3	(1)	100.0	(1)
Note: *** no data in the cell. Counts are shown in parentheses.						

A variety of factors may influence recidivism rates. Table 4 shows the impact of time served before release, race, age at the time of release, and the amount of time that elapsed between release and return to prison. All of the inmates who returned did so within one year of release.

Table 4 shows that the percentage of inmates returned to prison within each of the categories of time served is highest for those inmates who spent between 37 and 60 months in prison. One of the six inmates (16.7%) who spent 12 months or less, one of the eight who spent 13-36 (12.5%), and three of the four inmates who spent 37 to 60 (75.0%) months returned. Neither of the two inmates who spent 61 months or more returned within three years.

Recidivism rates for inmates scheduled to receive MW treatment are highest for white inmates in the sample. Nearly 40 percent (36.4%) of the 11 white inmates in the sample returned to prison. Among Whites, inmates in the non-treatment group (50.0%) were almost twice as likely to return as members of the treatment group (28.6%).

The data suggest Native American inmates benefit from MW treatment. The sample is comprised of 10 Native Americans. Of these, a single inmate was returned after three years of release. Of the inmates who completed medicine wheel treatment 8 of 9 (88.9%) had not returned to MWP within three years.

Age at release from prison indicates that younger inmates are more likely to return to prison. Three of the seven inmates ages 18 to 29 (42.9%) and two of the eight inmates ages 30-39 returned. In contrast, none of the four inmates ages 40-49, or the one inmate over age of 50 returned within three years of release.

<div align="center">

Anger Management Treatment

</div>

Introduction

The AM program at Montana Women's Prison is a cognitive-behavioral program. As it currently operates, the program runs for 20 sessions. Each of the sessions is two-hours long for a total of 40 hours. The program is taught in a group format with inmates going through in cohorts of about 20 each.

The primary goal of the program is to teach inmates to recognize sources of anger, identify the intensity of these sources, and develop strategies for coping with and managing anger. The program utilizes a variety of resources including videos, workbook assignments, and inmate group presentations. A major component of the treatment is the anger journal. On a weekly basis, inmates are required to fill out journals describing the events of the week and how they dealt with them.

Prior Research

Most studies linking institutional treatment and anger management have employed a pretest-posttest design (Eamon, Munchua, and Reddon 2001; Horn and Towl 1997; McDougall et al. 1990; Towell 1995; Smith, Smith, and Beckner 1994; Smith and Beckner 1993). The majority have found modest reduction in the overall levels of anger and an increase in the ability to cope with anger after treatment (Eamon, Munchua, and Reddon (2001); Smith, Smith, and Beckner 1994, Smith and Beckner 1993). Most of these studies are limited to a single anger measure; others do not include control groups. These limitations make it difficult to definitively cite treatment influences as the source of change.

A substantial proportion of the literature is oriented toward distinguishing between anger and aggression (Averill 1983; Eamon, Munchua, and Reddon 2001; Horn and Towl 1997;

McDougall et al. 1990; Towell 1995). Researchers argue the need to distinguish between inmates struggling with anger management and those who exhibit aggression. Aggression is seen as a characteristic of violent inmates who may not benefit from anger management treatment.

Anger management programs were initially developed for use with male inmates. Several authors have questioned the degree to the anger management problems of males and females can be treated with the same program (Horn and Towl 1997; Cundy 1995; Towl 1995). These studies cite a tendency toward self-harm, a history of abuse, and the presence of children as key differences in the treatment needs of male and female inmates. The impact of prisonization on anger levels of inmates is cited as a key variable for both male and female inmates (Mills and Kroner 2003; Ortmann 2000).

Methodology[6]

All of the inmates included in the sample were scheduled to receive AM treatment during their stay at MWP. Any inmate who was scheduled to receive AM treatment during the fiscal years of 2001-2003 was eligible for inclusion in the misconduct sample. Any inmate who was scheduled to receive AM treatment during their prison term and was released during or prior to fiscal year 2000 was eligible for inclusion in the recidivism sample.

Eligible inmates were identified by A0 number and placed into a sampling pool. The researchers were able to identify and obtain information on 38 inmates for the misconduct investigation and 20 inmates for the recidivism study. The inmates included in the study represent all inmates who were scheduled to receive anger management treatment at MWP during the study periods mentioned in the previous paragraph.

Misconduct[7]

Sample

The majority of the 38 inmates (65.8%) in the sample are White. Just less than 30 percent are Native American. The remaining (5.3%) are Hispanic. At the time of entry to prison, the average age of the inmates was just less than 32 years (Appendix Table 7).

The average sentence length received by the inmates was approximately 133 months (Appendix Table 8). Suspended sentences were given to 20 of the 38 inmates. The average length of sentence suspended was approximately 52 percent of the sentence

---

[6] An inmate is viewed as a viable candidate for the recidivism study if they have been released from prison for at least three years. Inmates transferred to regional prisons or to pre-release centers from Montana Women's Prison are included only if they were discharged from DOC custody and released into the community three years prior to March 15th 2004.

[7] Misconduct rates are generated by taking the number of misconducts each inmate received during their stay in prison divided by the total number of months the inmate spent in prison. This sum is then multiplied by 12 to produce annual misconduct rates.

length (68.4 months). All 38 of the inmates had a prior arrest. The majority (63.2%) had served time in jail or prison as a result of a prior arrest (Appendix Table 9).

Of the 38 inmates in the sample, 25 (65.8%) had completed AM treatment at the time of the study. An additional 13 (34.2%) inmates had not completed AM treatment.

Total, severe, and major misconduct

Table 5. Total, Severe, and Major Misconduct of Incarcerated Inmates Eligible for Anger Management Treatment Between 2001-2003

Conduct Type	All	Mean	Rate
Total Misconduct		**Mean**	**Rate**
0	31.6%	8.0	2.81
1-3	23.7		
4-7	0.0		
8-10	13.2		
More than 10	31.6		
Severe Misconduct		**Mean**	**Rate**
0	39.5%	4.21	1.50
1-3	23.7		
4-7	15.8		
8-10	13.2		
More than 10	7.9		
Major Misconduct		**Mean**	**Rate**
0	42.1%	3.79	1.31
1-3	21.1		
4-7	18.4		
8-10	5.3		
More than 10	13.2		
Total	38		

Note: Data represent all 38 inmates in the sample.

Just over 30 percent (31.6%) of the inmates scheduled to receive AM treatment had clear conduct and were never cited for any violations during their stay in prison. More than half (55.3%) had three or fewer total misconducts. There is a substantial portion of the sample (31.6%) that was cited more than 10 times for total misconduct violations. The inmates averaged eight total misconduct violations. The overall conduct rate was 2.81.

More than one-third (39.5%) of the inmates made it through their prison term without being cited for severe misconduct violations. The majority (63.2%) had three or fewer severe misconducts while incarcerated. The inmates averaged just over four severe misconduct violations. The overall severe conduct rate was 1.50.

Of the 38 inmates in the analysis, 42.1 percent left prison without being cited for major misconduct violations. The majority (64.2%) had three or fewer misconduct violations while incarcerated. The inmates averaged almost four major conduct violations. The overall major misconduct rate was 1.31.

Rate of misconduct before and after treatment

Table 6. Before and After Treatment Misconduct Rates of Incarcerated Inmates Eligible For Anger Managment Treatment Between 2001-2003 and Non-Treatment Inmates

| | Rate of Misconduct | | | |
Conduct Violations	Before Treatment	After Treatment	Difference (A-B)	% Change
Treatment (N = 25)				
misconduct for-				
Any violation**	4.85 (14)	1.53 (13)	-3.32	-68.5%
A severe conduct violation**	4.00 (12)	.97 (11)	-3.03	-75.8
A major violation**	2.39 (11)	.53 (6)	-1.86	-77.9
Inmate on inmate attack**	1.77 (4)	.28 (1)	-1.49	-84.2
Non-treatment (N = 13)				
misconduct for-				
Any violation		2.79 (9)		
A severe conduct violation		1.21 (8)		
A major violation		2.01 (10)		
Inmate on inmate attack		.64 (3)		

Note: Counts are shown in parentheses.
   ** Difference in rates before and after treatment is statistically significant (p<.05).

The top section of Table 6 shows the misconduct rates before and after treatment for the portion of the sample that completed AM treatment. The bottom section shows the misconduct rates for the portion of the sample (13inmates) who were scheduled to receive AM treatment but never completed it. Since they didn't receive treatment, before and after rates are not shown for the non-treatment group.

The rate of misconduct for inmates who completed anger management is significantly lower after treatment than it was before for each of the three misconduct measures. The rate of misconduct is reduced between just less than 80 percent (77.9%) for major violations and almost 76 percent (75.8%) for severe misconducts. The level of total misconduct falls by over 68 percent (68.5%) after treatment. The largest reduction in

rates of misconduct before and after treatment is found for inmate on inmate violence. The over 84 percent (-84.2) change represents a reduction from 9 inmate on inmate attacks before treatment to two attacks after treatment.[8]

Of those completing MW treatment, 65 percent (13 inmates) showed a reduction in their misconduct rate after treatment while 20 percent (4 inmates) showed an increase. Three of the inmates were misconduct free both before and after treatment and thus showed no change.

As shown in the bottom section of Table 6, the misconduct rates for the non-treatment group were much higher than the after-treatment rates of those who completed AM treatment.

Recidivism

Another way of measuring program effectiveness is to examine recidivism. According to the definition used by the Montana Department of Corrections, a recidivism rate is the percentage of inmates who return to prison for any reason within three years of release.

Sample

The majority of the 20 inmates (57.9%) in the sample are White. Just over 26 percent are Native American. Hispanic women comprise the remaining 15.8 percent. At the time of release from prison, the average age of the inmates was just over 33 years (Appendix Table 10).

The average sentence length received was 75 months (Appendix Table 11). Suspended sentences were given to 7 of the 20 inmates. The average length of sentence suspended was approximately 78 percent of the sentence length (58.4 months). All of the 20 inmates had a prior arrest. Most (70.0%) had served time in jail or prison as a result of a prior arrest (Appendix Table 12).

Of the 20 inmates in the sample, 11 (55.0%) had completed AM treatment at the time of the study. The remaining 9 inmates (45.0) had not completed AM treatment.

---

[8] The two inmate on inmate attacks after treatment were both committed by the same inmate.

Recidivism rates

Table 7. Recidivism Rates of Inmates Eligible for Anger Managment Treatment Released From Prison Before 2001			
Recidivism Measure	All	Treatment	Non-Treatment
Within three years following release percentage returned to prison for-			
Any offense	50.0% (10)	27.3% (3)	77.8% (7)
Note: Counts are shown in parentheses.			

Table 7 shows that inmates who completed AM treatment had lower rates of recidivism than those who did not complete treatment. Of the 20 inmates in the sample, 10 (50.0%) returned within three years of release.[9] Inmates in the non-treatment group were three times as likely to return as inmates in the treatment group.

---

[9] In the case that an inmate was returned to prison more than once in the three years after the release closest to treatment, they were counted only once in the generation of the recidivism rates.

Recidivism rates by time served prior to release, race, age at release, and time between release and return to prison

Table 8. Recidivism Rate of Inmates Eligible for Anger Managment Treatment
By Time Served, Race, Age at Release, and Time to Return to Prison

Time served in prison before release	Percent returned to prison for any type of crime within 3 years		
	All	Treatment	Non-Treatment
Time served in prison before release			
12 months or less	57.1% (4)	50.0% (1)	60.0% (3)
13-36	33.3 (2)	***	100.0 (2)
37-60	66.7 (2)	66.7 (2)	***
61 months or more	***	***	***
Race			
White	45.5% (5)	37.5% (3)	66.7% (2)
Native American	80.0 (5)	***	100.0 (4)
Hispanic	33.3 (1)	***	100.0 (1)
Age at Release			
18-29	50.0 (3)	33.3% (1)	66.7% (2)
30-39	50.0 (6)	28.6 (2)	80.0 (4)
40-49	50.0 (1)	***	100.0 (1)
50 or Older	***	***	***
Returned to prison for any offense within			
6 months	66.7% (2)	***	100.0 (1)
1 Year	33.3 (1)	100.0 (1)	***

Note: *** no data in the cell.
    Counts are shown in parentheses.

A variety of factors may influence recidivism rates. Table 8 shows the impact of time served before release, race, age at the time of release, and the amount of time that elapsed between release and return to prison.

Where data is available, inmates who completed AM treatment had lower rates of recidivism even when taking into account time served, race, age at release, and the amount of time that elapsed between release and return to prison.

The recidivism rate is highest for the Native American inmates in the sample. Four of the five Native American inmates (80.0%) returned within three years of release. None of these inmates had completed AM treatment. Of the three Hispanic women in the sample,

one returned. The returning Hispanic inmate also did not complete anger management treatment during her prison term.

Data on the amount of time that elapsed between release and return to prison is available for only three of the ten returning inmate. All three returned within a year of release.

Discussion

The purpose of this research was to examine the effectiveness of the Medicine Wheel (MW) chemical dependency program and Anger Management (AM) treatment offered at the Montana Women's Prison (MWP). Program effectiveness was measured using the rate of inmate misconduct while in MWP and the three-year recidivism rate of released inmates. In general, both of these programs appear to be effective.

A Few Cautions

A few cautions are in order in interpreting the results of this study. The quality of some of the data on which this study is based is questionable. The researchers frequently ran into incomplete information in inmate files. It is difficult to access the validity and reliability of these data. And recidivism is a very rough measure of program success. There is no way to gather information on all the crimes released offenders commit (Maltz 1984; Spohn and Holleran 2002).

In much of the analysis, inmates who underwent MW treatment or AM treatment are compared to a group of inmates who were recommended for the treatment but never completed it. MW and AM comparison groups are not true non-treatment groups. In all likelihood, many of the inmates in the comparison groups have received a significant amount of chemical dependency and/or other therapeutic treatment across the course of their lives. But only those who completed MW or AM treatment at MWP are included in the treatment groups. The likely effect would be to make it harder to statistically demonstrate a treatment effect. Inmates in the treatment and non-treatment groups may actually not be very different in terms of their exposure to chemical dependency or other therapeutic treatment.

Because of the small number of cases meeting the study criteria, much of the analysis is based on small samples. Smaller samples tend to exhibit larger sampling error, making it more difficult to have complete confidence in the results.

Few of the differences found are statistically significant. When differences are not statistically significant, there is a danger that the differences are a result of sampling error. Statistical significance is, in part, a function of sample size. Given the small number of available cases, it is not surprising that it was difficult to show statistical significance in much of this analysis.

Medicine Wheel Treatment

The Medicine Wheel treatment has not been studied extensively. However, studies of chemical dependency treatment programs have, in general, found that inmates undergoing such treatment tend to exhibit lower levels of misconduct. In the present study, MW treatment does appear to have a small, but measurable impact on misconduct. For those undergoing MW treatment, the percentage of inmates with one or more misconduct violations decreased after treatment.

Prior research has also frequently found that chemical dependency treatment programs reduce recidivism. In the present study, inmates who successfully completed MW treatment at MWP had a lower three-year recidivism rate than a comparison group of those recommended for but not completing MW treatment. MW treatment seems to work better at reducing recidivism among Native American inmates.

Interestingly, although those who undergo MW treatment have lower overall recidivism rates relative to the non-treatment group, recidivism in the first six months following release was actually higher among inmates in the treatment group.

The evidence supports the proposition that completing MW treatment decreases inmate misconduct and reduces recidivism. This research also suggests that MW programming does not work as well for white inmates. The MW program is specifically oriented towards Native American inmates. The Intensive Treatment Unit Chemical Dependency program (which is also available at MWP) has been shown to be effective at reducing inmate misconduct and recidivism at the Montana State Prison among white male inmates. Further research would be needed to determine if the Intensive Treatment Unit Chemical Dependency program at MWP also is effective among white female inmates.

The fact that all of the MW treatment failures (as measured by recidivism) occur in the critical first year following release implies the need to better address prisoner reentry into the community. Although this issue is beyond the scope of the present study, there is a research literature that examines factors associated with successful reentry (Sieter 2004; Seiter and Hadela, 2003; Inciardi, Martin, and Surratt. 2001; Taxman and Bouffard 2002).

Anger Management Treatment

Most of the prior studies done on the effectiveness of anger management treatment have shown modest increases in the ability to handle anger. But there is little discussion in the literature of the impact of AM treatment on inmate misconduct. In the present study, AM treatment does appear to have a statistically significant impact on misconduct. For those undergoing AM treatment, misconduct rates decreased substantially after treatment. Further, the after-treatment misconduct rates are lower than those of inmates in a comparison group recommended for but not completing MW treatment.

Prior research has also been largely silent on whether or not AM treatment reduces recidivism. In the present study, inmates who successfully completed AM treatment at

MWP had a significantly lower three-year recidivism rate than a comparison group of those recommended for but not completing AM treatment.

The evidence supports the proposition that completing AM treatment decreases inmate misconduct and reduces recidivism. This research also provides evidence that contrary to suggestions made by some researchers, AM treatment can be very effective in reducing misconduct and recidivism among female convicts.

References

Ada, Melton P., Michelle Chino, Phillip A. May, and J. Phillip Gossage. 2000. "Promising Practices and Strategies to Reduce Alcohol and Substance Abuse Among American Indians and Alaska Natives." Washington, DC: US Department of Justice, Office of Justice Programs.

Averill, J.R. 1983. "Studies on Anger and Aggression: Implications for Theories of Emotion." *American Psychologist* 38:1145-1160.

Baumer, Eric. 1997. "Levels and Predictors of Recidivism: The Malta Experience." *Criminology* 35:601-628.

Craddock, Amy. 1996. "A Comparative Study of Male and Female Prison Misconduct Careers." *The Prison Journal* 76:60-80.

Cundy, S.L. 1995. "An Evaluation of Anger Management Groupwork of Women Prisoners." Unpublished report, Institute of Criminology, University of Cambridge.

Eamon, Karen C., Michelle M. Munchua and John R. Reddon. 2001. "Effectiveness of Anger Management Program for Women Inmates." *Journal of Offender Rehabilitation* 34:45-60.

Gendreau, Paul, Tracy Little, and Claire Goggin. 1996. "A Meta-Analysis of The Predictors of Recidivism: What Works!" *Criminology* 34:575-607.

Horn, Rebecca and Graham Towl. 1997. "Anger Management for Women Prisoners." *Issues in Criminological and Legal Psychology* 29:57-62.

Inciardi, James A., Steven S. Martin, and Clifford A. Butzin. 2004. "Five-Year Outcomes of Therapeutic Community Treatment of Drug Involved Offenders After Release From Prison." *Crime and Delinquency* 50:88-107.

Maltz, Micheal D. 1984. *Recidivism*. Orlando: Academic Press.

Matthews, Roger and John Pitts. 1998. "Rehabilitation, Recidivism, and Realism:

Evaluating Violence Reduction Programs in Prison." *The Prison Journal* 78:390-405.

Mills, Jeremy F. and Daryl G. Kroner. 2003. "Anger as a predictor of Institutional Misconduct." *Journal of Interpersonal Violence* 18:282-294.

Novaco, Raymond W. 1975. "Anger Control: The Development and Evaluation of an Experimental Treatment." Lexington, MA: D.C. Health.

Ortmann, Rudiger. 2000. "The Effectiveness of Social Therapy in Prison: A Randomized Experiment." *Crime and Delinquency* 46:214-230.

Pearsin, Frank S. and Douglas S. Lipton. 1999. "A Meta-Analytic Review of the Effectiveness of Corrections-Based Treatment For Drug Abuse." *The Prison Journal* 334-410.

Seiter, Richard P. 2004. "Inmate Reentry: What Works and What to Do About It." *Corrections Compendium* 29:1-5; 33-35.

Seiter, Richard P. and Karen R. Kadela. 2003. "Prisoner Reentry: What Works, What Does Not, and What Is Promising." *Crime and Delinquency* 49:360-388.

Smith, Larry L., James N. Smith, and Beryl M. Beckner. 1994. "An Anger Management Workshop for Women Inmates." *Families in Society* 75:172-175.

Smith, Larry L. and Beryl M. Beckner. 1993. "An Anger Management Workshop for Inmates in a Medium Security Facility." *Journal of Offender Rehabilitation* 19:103-111.

Spohn, Cassia and David Holleran. 2002. "The Effects of Imprisonment on Recidivism Rates of Felony Offenders: A Focus on Drug Offenders." *Criminology* 40:329-358.

Taxman, Faye S. and Jeffery A. Bouffard. 2002. "Assessing Therapeutic Integrity In Modified Therapeutic Communities For Drug Involved Offenders." *The Prison Journal* 82:189-212.

Towl, Graham. 1995. "Anger Management Groupwork." *Issues in Criminological and Legal Psychology* 23:31-35.

White Bison. 2002. *The Red Road to Wellbriety*. 2002. Colorado Springs, CO: White Bison, Inc.

White Bison. nd. http://www.whitebison.org/ (See especially "Wellbriety Movement for Prisons" and "Wellbriety! Online Magazine.")

APPENDIX

Table A.1 Demographic Characteristics of Incarcerated Inmates
Eligible For Medicine Wheel Treatment Between 2000-2003

Prisoner Characteristic	Percent of Prisoners		
	All	Treatment	Non Treatment
Race			
White	57.1%	37.1%	20.0%
Native American	40.0	17.1	22.9
Hispanic	2.9	2.9	0.0
Age at Release			
18-24	11.4%	11.4%	0.0
25-29	20.0	5.7	14.3
30-34	34.3	20.0	14.3
35-39	8.6	5.7	2.9
40-44	14.3	11.4	2.9
45-49	2.9	0.0	2.9
50 and older	8.6	2.9	5.7
Age at Release			
Minimum	18	18	26
Maximum	58	50	58
Mean	33.5	31.9	35.7
Total	36	21	15

Note: Race and age are reported for 35 of the 36 inmates in the sample.

Table A.2 Sentence Length, Suspended Sentence, and Months Served for Incarcerated Inmates Receiving Medicine Wheel Treatment Between 2000-2003

Prisoner Characteristic	All	Treatment	Non-Treatment
Sentence length (in months)			
Minimum	6	8	6
Maximum	480	480	120
Mean	92.7	108.4	70.8
Suspended sentence (in months)			
Minimum	24	36	24
Maximum	120	120	96
Mean	60	67	50.7
Months served			
Minimum	6	7	6
Maximum	83	83	35
Mean	19.9	23.0	15.5
Total	36	21	15

Note: Sentence length is recorded for each of the 36 inmates in the sample.
28 of the 36 inmates in the analysis were given a suspended sentence.

Table A.3 Prior Criminal Record of Incarcerated Inmates Eligible for
Medicine Wheel Treatment Between 2000-2003

Prior to crime for which imprisoned	All	Treatment	Non-Treatment
Percent with prior arrest for any crime			
No Prior Arrests	5.9%	10.0%	0.0
1-5	23.5	25.0	21.4
6-10	44.1	50.0	35.7
11-15	17.6	15.0	21.4
16-20	5.9	0.0	14.3
More than 21	2.9	0.0	7.1
Percent with prior arrest for any offense	94.1%	90.0%	100.0%
Percent with previous incarceration for any offense	66.7%	57.1%	80.0%
Total	36	25	11

Note: Percent with prior arrest is recorded for 34 of the 36 inmates in the sample.
    Percent with previous incarceration is recorded for all 36 inmates.

Table A.4. Demographic Characteristics of Inmates Eligible for
Medicine Wheel Treatment Released From Prison Before 2001

Prisoner	Percent of Released Prisoners		
Characteristic	All	Compliant	Non Treatment
Race			
White	47.8%	30.4%	17.4%
Native American	47.8	39.1	8.7
Black	4.3	4.3	0.0
Age at Release			
18-24	4.8%	4.8%	0.0%
25-29	28.6	19.0	9.5
30-34	23.8	19.0	4.8
35-39	14.3	9.5	4.8
40-44	14.3	9.5	4.8
45-49	9.5	4.8	4.8
50 or Older	4.8	4.8	0.0
Age at Release			
Minimum	24	24	29
Maximum	53	53	48
Mean	34.9	34.4	36.3
Total	23	17	6

Note: Race is reported for all 23 of the inmates in the sample.
    Age is reported for 21 of the 23 inmates.

Table A.5 Sentence Length, Suspended Sentence, and Time Served for Inmates Eligible for Medicine Wheel Treatment Released From Prison Before 2001

Prisoner Characteristic	All	Treatment	Non-Treatment
Sentence length (in months)			
Minimum	24	24	36
Maximum	480	480	240
Mean	104.1	103.4	106
Suspended sentence (in months)			
Minimum	24	24	24
Maximum	120	120	120
Mean	52.5	47.3	68
Months served			
Minimum	1	8	1
Maximum	83	83	57
Mean	30.6	30.7	30.2
Total	23	17	6

Note: Sentence length is recorded for all 23 of the inmates in the sample.
12 of the 23 inmates were given a suspended sentence.

Table A.6 Prior Criminal Record of Inmates Eligible for Medicine Wheel
Treatment Released From Prison Before 2001

Prior to crime for which imprisoned	All	Treatment	Non-Treatment
Percent with prior arrest for any crime			
No Prior Arrests	8.7%	11.8%	0.0%
1-5	26.1	11.8	66.7
6-10	21.7	29.4	0.0
11-15	26.1	29.4	16.7
16-20	8.7	11.8	0.0
More than 21	8.7	5.9	16.7
Percent with prior arrest for any offense	92.3%	88.2%	100.0%
Percent with previous incarceration for any offense	69.9%	76.5%	50.0%
Total	23	17	6

Note: Percent with prior arrest is recorded for all 23 of the inmates in the sample.
Percent with previous incarceration is recorded for all 23 inmates.

Table A.7 Demographic Characteristics of Incarcerated Inmates
Eligible for Anger Management Treatment Between 2000-2003

Prisoner Characteristic	Percent of Prisoners		
	All	Treatment	Non Treatment
Race			
White	65.8%	42.1%	23.7%
Native American	28.9	18.4	10.5
Hispanic	5.3	0.0	5.3
Age at Release			
18-24	28.9%	13.2%	15.8%
25-29	13.2	0.0	13.2
30-34	21.1	7.9	13.2
35-39	26.3	23.7	2.6
40 or older	10.5	2.6	8.9
Age at Release			
Minimum	19	20	19
Maximum	51	51	47
Mean	31.2	32.5	28.6
Total	38	25	13

Note: Race and age are reported for each of the 38 inmates in the sample.
The category "other" includes all inmates of races not listed in the
table and those who are mixed race.

Table A.8 Sentence Length, Suspended Sentence, and Time Served for Incarcerated Inmates Eligible for Anger Management Treatment Between 2000-2003

Prisoner Characteristic	All	Treatment	Non-Treatment
Sentence length (in months)			
Minimum	6	6	36
Maximum	720	480	720
Mean	132.7	112.1	172.6
Suspended sentence (in months)			
Minimum	24	24	36
Maximum	240	120	240
Mean	68.4	57.2	89.1
Months served			
Minimum	6	6	7
Maximum	88	70	88
Mean	29.6	29.0	30.6
Total	38	25	13

Note: Sentence length is recorded for 37 of the 38 inmates in the sample.
20 of the 38 inmates were given a suspended sentence.

Table A.9 Prior Criminal Record of Incarcerated Inmates Eligible for
Anger Management Treatment Between 2000-2003

Prior to crime for which imprisoned	All	Treatment	Non-Treatment
Percent with prior arrest for any crime			
No Prior Arrests	0.0%	0.0%	0.0%
1-5	45.7	47.6	46.2
6-10	22.9	28.6	15.4
11-15	14.3	9.5	23.1
16-20	8.6	4.8	7.7
More than 21	8.6	9.5	7.7
Percent with prior arrest for any offense	100.0%	100.0%	100.0%
Percent with previous incarceration for any offense	63.2%	60.0%	69.2
Total	38	25	13

Note: Percent with prior arrest is recorded for 35 of the 38 inmates in the sample.
       Percent with previous incarceration is recorded for all 38 inmates.

Table A.10 Demographic Characteristics of Inmates Eligible for Anger
Management Treatment Released From Prison Before 2001

Prisoner Characteristic	Percent of Prisoners Released		
	All	Treatment	Non Treatment
Race			
White	57.9%	42.1%	15.8%
Native American	26.3	5.3	21..1
Hispanic	15.8	10.5	5.3
Age at Release			
18-24	20.0%	10.0%	10.0%
25-29	10.0	5.0	5.0
30-34	10.0	10.0	0.0
35-39	50.0	25.0	25.0
40 or older	10.0	5.0	5.0
Age at Release			
Minimum	23	23	23
Maximum	43	41	43
Mean	33.6	33.9	33.1
Total	20	11	9

Note: Race is reported for 19 of the 20 inmates in the sample.
  Age is reported for all 20 inmates.
  The category "other" includes all inmates of races not listed in the
  table and those who are mixed race.

Table A.11 Sentence Length, Suspended Sentence, and Time Served for Inmates
Eligible for Anger Management Treatment Released From Prison Before 2001

Prisoner Characteristic	All	Treatment	Non-Treatment
Sentence length (in months)			
Minimum	5	24	5
Maximum	120	120	120
Mean	75	87.3	59.9
Suspended sentence (in months)			
Minimum	1	24	1
Maximum	180	60	180
Mean	58.4	40	72.3
Months served			
Minimum	5	8	5
Maximum	61	61	48
Mean	25.9	28.0	23.4
Total	20	11	9

Note: Sentence length is recorded for all 20 of the inmates in the sample.
7 of the 20 inmates were given a suspended sentence.

Table A.12 Prior Criminal Record of Inmates Eligible for Anger Management Treatment Released From Prison Before 2001

Prior to crime for which imprisoned	All	Treatment	Non-Treatment
Percent with prior arrest for any crime			
No Prior Arrests	0.0%	0.0%	0.0%
1-5	36.8	27.3	50.0
6-10	31.6	36.4	25.0
11-15	21.1	36.4	0.0
16-20	5.3	0.0	12.5
More than 21	5.3	0.0	12.5
Percent with prior arrest for any offense	100.0%	100.0%	100.0%
Percent with previous incarceration for any offense	70.0%	72.7%	66.7%
Total	20	11	9

Note: Percent with prior arrest is recorded for 19 of the 20 inmates in the sample.
        Percent with previous incarceration is recorded for all 20 inmates.