

# **REPORT OF RESEARCH FINDINGS**

**Collaborative Evaluation Project (CCI, MNRC, PFNC, HRTC)**

**December 2007**

# Table of Contents

SUMMARY/CONCLUSIONS.....	1
RECOMMENDATIONS FOR FUTURE EVALUATION RESEARCH .....	2
METHODOLOGY .....	3
DETAILED RESULTS .....	4
Medical Problems .....	4
Legal Problems.....	4
Social Support.....	5
Psychological/emotional.....	7
Alcohol/drug use .....	8
SOCRATES .....	9
IMPACT OF DIFFERENT LEVELS AND TYPES OF TREATMENT .....	10
Treatment Period.....	10
Number of Therapy Sessions.....	10
Medication Related Nurse Visit .....	15
PERCEIVED IMPACT AS A RESULT OF PARTICIPATION IN HARM REDUCTION PROGRAM .	18
APPENDIX – Pre and Post Treatment Assessment Instruments .....	20

## SUMMARY/CONCLUSIONS

- ❖ Clients perceive that their participation in the MNRC harm reduction program benefits them along a number of dimensions including general health, mental health, substance use, personal relations, and life stability. In particular, the program is helpful in reducing substance use related problems and accessing services to help with their problems in general.
- ❖ In general, clients reported improved health outcomes and less concern over health-related and other life problems after participation in the program. Of note, especially given the small sample size, were statistically significant improvements (95% confidence level) between initial and follow measures for:
  - how much family problems worried or bothered them in the last 30 days ( $p=.02$ )
  - how much the way they spent free time worried or bothered them in the last 30 days ( $p=.03$ )
  - how much psychological or emotional problems worried or bothered them in the past 30 days ( $p=.002$ )
  - the importance of receiving treatment for psychological or emotional problems ( $p=.009$ )
  - how much problems with alcohol worried or bothered them in the past 30 days ( $p=.098$ )
- ❖ After participation in the program, clients reported *increases* in the time spent with their family and by themselves and a *decrease* in amount of time spent with friends. This may partly explain and be related to why they were less worried or bothered by family problems and with how they spent their free time.
- ❖ For family support, clients seemed to shift their focus away from their parents or siblings and towards their partners or other relatives after participating in the program. Reliance on children stayed about the same.
- ❖ The impact of the program on social relationships seems mixed. *More* clients reported having friends that they could trust for support and help. However, *fewer* reported having someone in their lives with whom they could share their joys and sorrows. The nature of family and social relationships requires further study in order to understand the implications they have for health outcomes for this population.
- ❖ Clients reported better psychological and emotional states after participating in the program. They reported *fewer* incidents in six out of the seven psychological or emotional states measured. Overall, those who had experienced these states were less worried or bothered by them after their participation in the program. This overall improvement was the most significant statistically of all the before and after measures ( $p=.002$ ; 95% confidence). Clients also felt that the need for treatment for psychological and emotional problems was lower after their participation, perhaps signaling the effectiveness of the treatment they received.

- ❖ The impact of participation in the program with regard to alcohol and drug use is hard to determine with only six individuals completing both initial and follow up measurements for alcohol use and two individuals for drug use. In spite of the small sample size, the decrease in being worried or bothered by problems with alcohol was statistically significant ( $p=.098$ ; 95% confidence). This indicates improvement in this area for clients in the program. Most of those who reported problems with substance use (more than 8 out of 10) agreed that they had fewer substance use related problems after participating in the program.
- ❖ A pre post comparison of SOCRATES measures for alcohol use supports evidence of improvement in this area. After participating in the program clients perceive *less harm* in general and to others due to their alcohol use. Results also indicate that clients perceive their alcohol use as less of a problem after being in the program (i.e. they need *less help* and are *less likely* to feel their alcohol use is a problem).
- ❖ An analysis of the impact of different amounts and types of treatment received by the individuals participating in this study indicates that there may be subgroups within this population that require different amounts and types of treatment depending on their current condition and effect of treatment available. Some clients may require more intensive treatment beyond harm reduction therapy.
- ❖ It appears that even minimal contact (2 therapy sessions) with the program has beneficial outcomes. It could be that initiating contact with a supportive agency such as MNRC has a stabilizing effect regardless of the type and amount of treatment that follows. Larger samples and more rigorous data collection standards and tracking procedures are required to further examine the impact of different amounts and types of treatment.

## **RECOMMENDATIONS FOR FUTURE EVALUATION RESEARCH**

- Continue using simplified instrument to measure changes in client outcomes
- Systematize recruitment for participation in the initial and follow up outcome assessments
- Increase resources devoted to evaluation including staff time to implement and administer
- Consider categorizing individuals based on treatment needs
- Repeat analysis upon obtaining a larger sample size

## **METHODOLOGY**

### Role of the César E. Chávez Institute (CCI)

CCI was approached after the harm reduction based program had commenced in order to redesign and simplify the evaluation process. CCI proposed a pre and post assessments design to evaluate changes in outcomes as a result of participation in the program. The design entailed simplifying the original evaluation instrument, tracking participation in the program and including perceived impact measurements to be administered with the post treatment assessment. CCI also assisted with data collection management, coded and entered assessment data into an SPSS database, analyzed the data, and reported on results and findings with recommendations for future evaluation efforts.

### Instrument development

Salient items were selected from an original Spanish language instrument to measure client outcomes by means of pre treatment and post treatment assessments. Ten perceived impact questions were added and administered to those participants completing the post assessment (SEE APPENDIX).

### Data collection

MNRC staff was responsible for data collection. The data collection period spanned close to one and a half years. The first assessment was conducted in June of 2006. The last post assessment was conducted in October 2007. The time period between initial and follow up assessments ranged from 3 months to 14 months. MNRC also tracked client participation in the program by means of electronic treatment notes.

### Sample

Spanish speaking clients needing treatment (therapy and/or medication) at MNRC were recruited by MNRC staff to participate in the evaluation. A total of 21 individuals completed both the pre and post assessments. In addition to these 21 individuals, another 30 individuals completed initial assessments (10 of which completed the original instrument). Those individuals who completed both the initial and follow up assessments are included in this report.

## **DETAILED RESULTS (analysis of 21 cases for which there are pre and post measures)**

### Medical Problems

- **Days with health/medical problems in the last 30 days**  
For the initial measure, 8 individuals (38%) reported no health or medical problems in the past 30 days. Five individuals reported health or medical problems for all 30 of the past 30 days. On average, the number of days with health or medical problems in the past 30 days decreased from 10 days to 7 days after having participated in the program during the study period.
- **Rate severity of problems in last 30 days**  
Respondents ranked the severity of health or medical problems (i.e. "how much have these medical problems worried or bothered you") on a scale of 1 to 10, where 1 is the least amount of worry or bother and 10 is the most. For both the initial and follow up measures, on average respondents gave the severity of their health or medical problems a rank of 5.75. This may indicate that the severity of the problems remain the same even though the number of days with problems decreased.

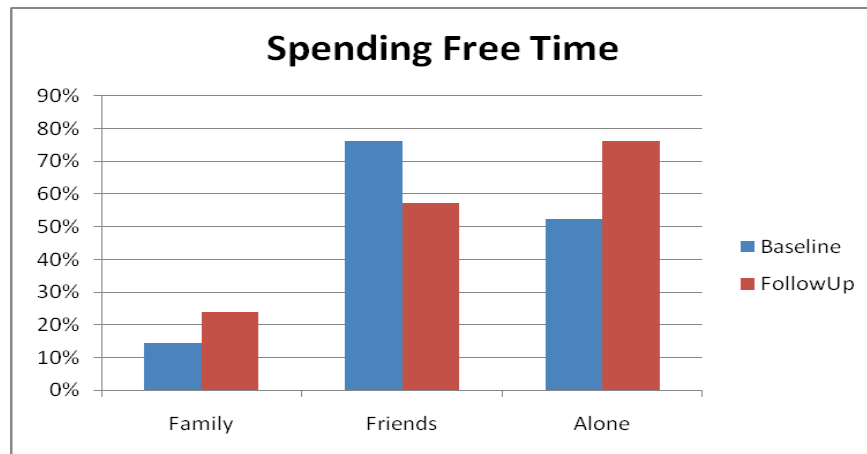
### Legal Problems

- **Currently dealing with legal problem**  
Three out of the 21 participants were currently dealing with legal problems when the initial measure was taken. For the follow up measure, a different set of 4 individuals out of the 21 were currently dealing with legal problems.
- **Rate severity of legal problems**  
Generally, the severity of the legal problems was ranked high on a scale from 1 to 10. With such small sample sizes for those with legal problems, the impact of treatment is difficult to determine.

## Social Support

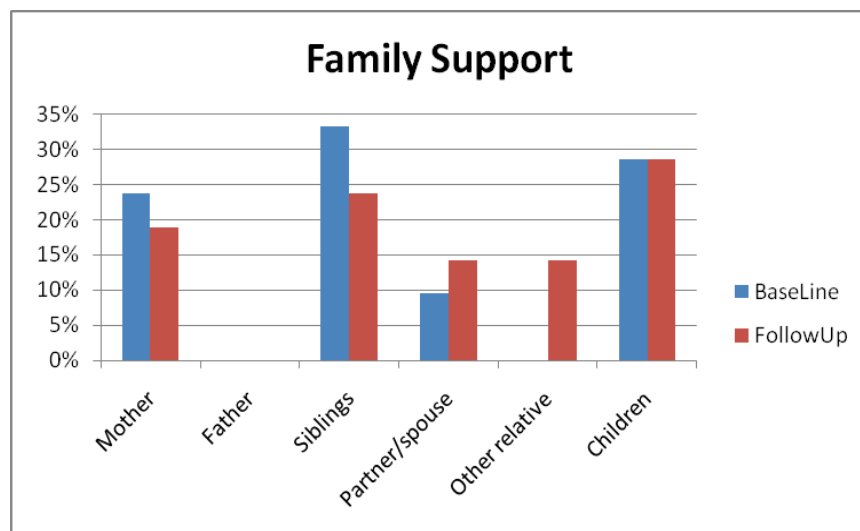
- **How free time spent (family, friends, alone)**

After participating in the program, respondents were more likely to report spending their free time alone (76%) than with friends (57%). This contrasts with the initial measure where respondents reported spending more time with friends (76%) than alone (52%). After participating in the program, more reported spending their free time with family than when they entered the program (24% compared to 14%). The significance of time spent alone and with family or friends requires further exploration to determine the effect of harm reduction treatment on life and health outcomes.



- **Family members you can count on**

Respondents were more likely to rely on their mother, siblings or children for help and support. This was true both for the initial and follow up measures.

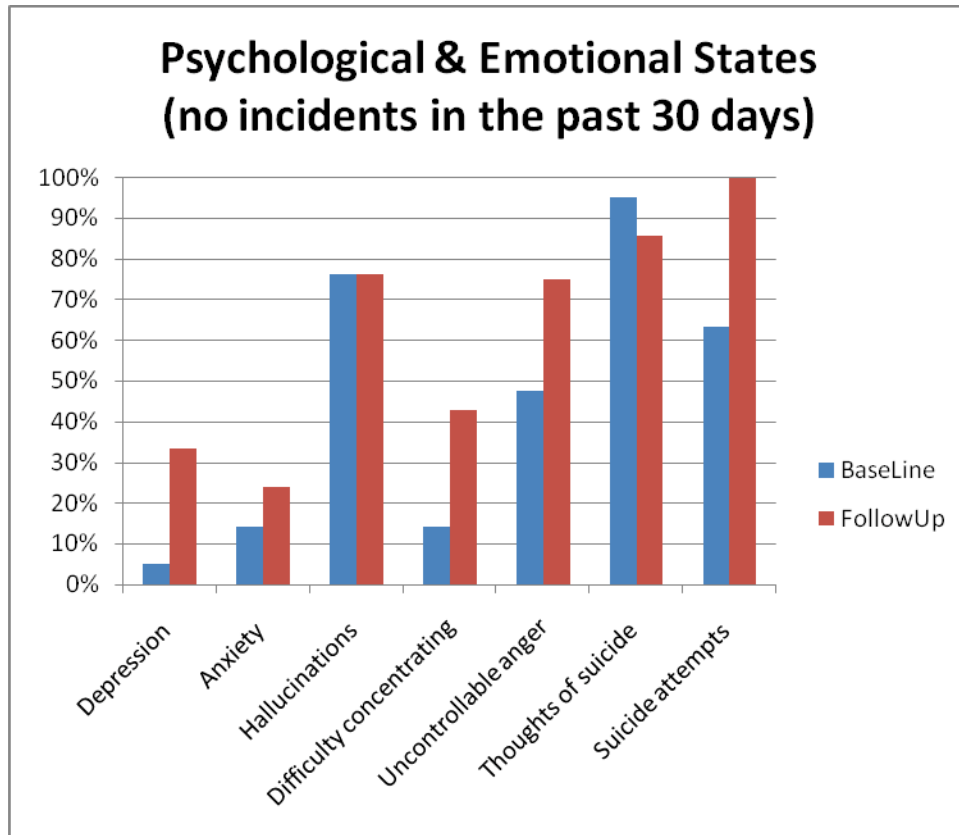


- **Other social support you can count on**  
After participating in the program, *more* respondents reported having friends that they could trust for support and help (62% compared to 48%).
- **Person in your life**  
After participating in the program, *fewer* respondents reported having someone in their lives with whom they could share their joys and sorrows (43% compared to 67%).
- **Severity of family problems in last 30 days**  
On average, the severity of family problems in the past 30 days *decreased* from 8 (on a scale of 1 to 10) to 5 after having participated in the program during the study period ( $p=.02$  ; 95% confidence level). This statistically significant result is remarkable particularly given the small sample size of 18 individuals who reported having a history of family problems during the initial and follow up measures.
- **Severity of problems with others in last 30 days**  
For problems with others, respondents ranked the severity *slightly higher* for the follow up measure (6.2 on average compared to 5.4).
- **Rate worry level regarding free time in last 30 days**  
For problems regarding how individuals spend their free time, respondents ranked the severity *lower* for the follow up measure (5 on average compared to 7). This result was statistically significant ( $p=.031$ ; 95% confidence level).

## Psychological/emotional

- **Psychological and emotional states in the past 30 days** (depression, anxiety, hallucinations, difficulty concentrating, uncontrollable anger, suicide ideation, and suicide attempts)

Overall, respondents reported better psychological and emotional states after their participation in the program. The percent of respondents who reported no incidents of psychological and emotional states in the past 30 days increased for six out of the eight psychological and emotional states measured, stayed the same for one (hallucinations) and decreased slightly for one (suicide ideation).



- **Rate severity of psychological/emotional problems**  
On average, respondents ranked their psychological or emotional problems lower on a scale of 1 to 10 after their participation in the program (5.2 compared to 8.4). This result is statistically significant ( $p=.002$ ; 95% confidence level). Given the small sample size, this results shows great improvement in perceptions of mental health as a result of participation in the program.
- **Rate importance of treatment for psychological/emotional problems**  
On average, respondents ranked their need for treatment for psychological or emotional problems lower on a scale of 1 to 10 after their participation in the program (6.6 compared to 8.7). This result is statistically significant ( $p=.009$ ; 95% confidence level). This result also shows the benefit of participation in the

program with regard to perceptions from respondents of their need for treatment for their psychological or emotional states.

#### Alcohol/drug use

- **Problems due to use in last 30 days**  
Slightly more of the respondents reported no problems due to alcohol use in the past 30 days for the follow up measure compared to the initial measure (57% and 53% respectively).
- **Rate worry level regarding alcohol use in last 30 days**  
For those 7 individuals who reported problems with alcohol use in the past 30 days for both the initial and follow up measures, on average, respondents ranked the severity of their problems lower after they participated in the program (5.1 compared to 7.4). This result is statistically significant ( $p=.098$ ; 95% confidence level) in spite of the small sample size.
- **Rate importance of treatment for alcohol problems**  
On average, the importance of treatment for alcohol problems was slightly lower for the follow up compared to the initial assessment on a scale of 1 to 10 (6.3 and 7.4 respectively). Again, this is based on a small sample size of 6 individuals.
- **Rate worry level regarding drug use in last 30 days**  
Only 2 individuals reported problems due to drug use in the past 30 days for both the baseline and follow up measures.
- **Rate importance of treatment for drug problems**  
Only 2 individuals rated the importance of treatment for their drug-related problems in the past 30 days.

## SOCRATES

A total of 6 individuals completed both pre and post treatment SOCRATES (Stages of Change Readiness and Treatment Eagerness Scale) assessments for alcohol use. SOCRATES is a 19 item standardized measure designed to help determine readiness to change for individual substance use.

In general, the results indicate an improvement in perceptions of clients of the harm done in general and to others because of their alcohol use. Clients also appear to see their alcohol use as less of a problem after having participated in the program. A comparison of initial and follow up measures results in significant differences for six of the 19 items. These are:

- ***I desire to make changes in my alcohol use*** ( $p=.076$ ). Individuals reported *less* of a desire to change after their participation in the program. It could be an indication that the treatment received caused clients to feel better about their alcohol consumption reducing their need to change.
- ***My use of alcohol is harmful to others*** ( $p=.025$ ). Clients reported *less* harm done to others after participating in the program.
- ***My use of alcohol causes harm in general*** ( $p=.043$ ). Again, clients reported *less* harm in general due to alcohol use after having participated in the program.
- ***I want help to prevent relapse and problems related to use*** ( $p=.02$ ). After participation in the program, clients were *less* likely to want help. This can be interpreted as not needing as much help and therefore, an improvement.
- ***I recognize my alcohol use problems*** ( $p=.062$ ). Clients were *less* likely to acknowledge problems due to alcohol use. Depending on which stage of change the individual is in may affect their response to this question. The beneficial effects of the participation in the program may actually make alcohol and substance use less of a problem.
- ***There are times when I drink too much*** ( $p=.076$ ). Clients were *less* likely to agree with this statement after having participated in the program.

## **IMPACT OF DIFFERENT LEVELS AND TYPES OF TREATMENT**

The evaluation design included examining changes in client outcomes by different amounts and types of treatment offered by the program. For analysis purposes the sample was split by the amount of treatment time between assessments, whether clients had more or fewer therapy sessions during their treatment period, and whether or not they had seen a nurse for a medication related reason. This information was recorded and tracked by MNRC staff.

Results indicate that any contact with the program appears to be beneficial. It could be that taking the first step to make use of services at MNRC indicates a willingness and intention to make improvements regardless of the condition of the client. Results also indicate that there are likely various possible treatment paths in the program for clients based on their individual needs. Some clients might require more intensive or different types of treatment as they address their particular life and health issues.

### Treatment Period

For analysis purposes the sample conveniently fell into two groups of about equal size, allowing for a more direct comparison of those who were in treatment for a longer period with those who were in treatment for a shorter period. Despite a small sample size, those who had been in treatment for the longer period (n=11) showed statistically significant improvement with regard to:

- how bothered or worried they were with family problems (p=.001)
- how bothered or worried they were with the way they spent their free time (p=.017)
- how bothered or worried they were with psychological or emotional problems (p=.000)
- how important it is to receive treatment for psychological or emotional problems (p=.023)

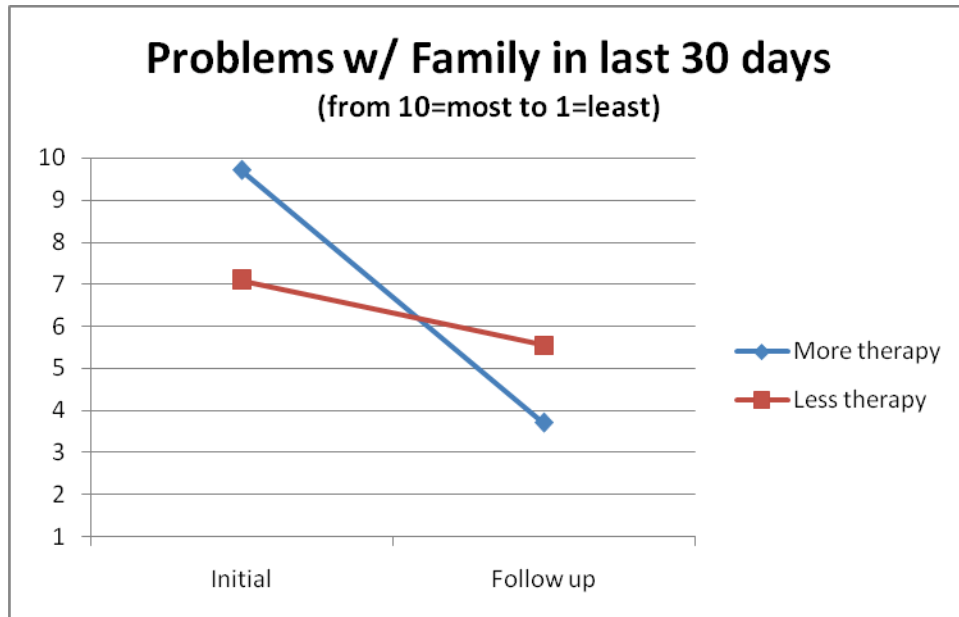
Clients who had been in treatment for a shorter period of time (n=10) also showed improvement along most of the outcomes measured although without the assurance of statistical significance. The group with less time in treatment did show a statistically significant reduction in the number of days with medical problems in the last 30 days (p=.02). These results support the notion of the effectiveness of a harm reduction approach over longer periods of time for this population.

### Number of Therapy Sessions

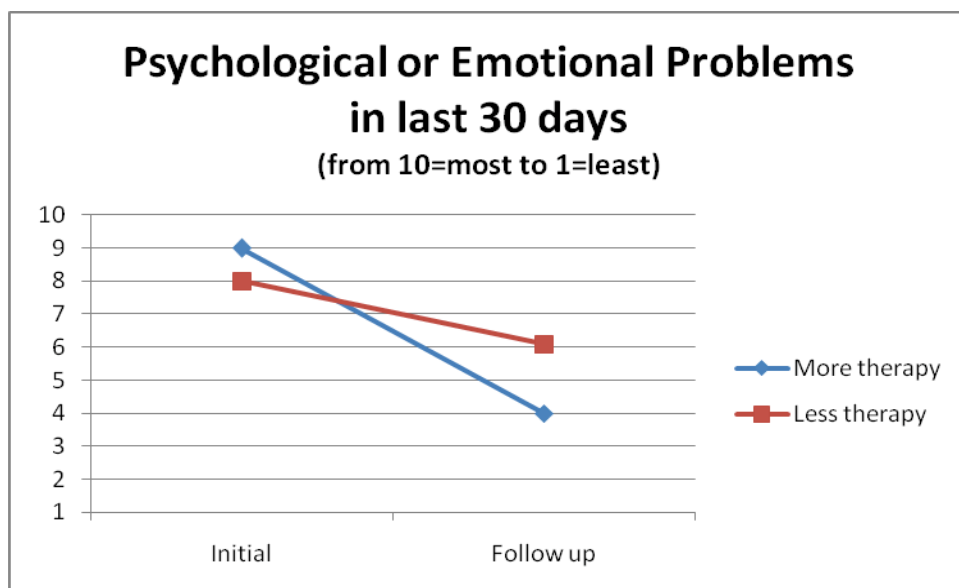
To analyze the impact of the number of therapy sessions received by clients, the sample was split into those who had the minimum number of 2 therapy sessions (n=13)

and those who had more (n=8). Although there was general improvement for both groups, the degree of improvement varied somewhat by outcome measured.

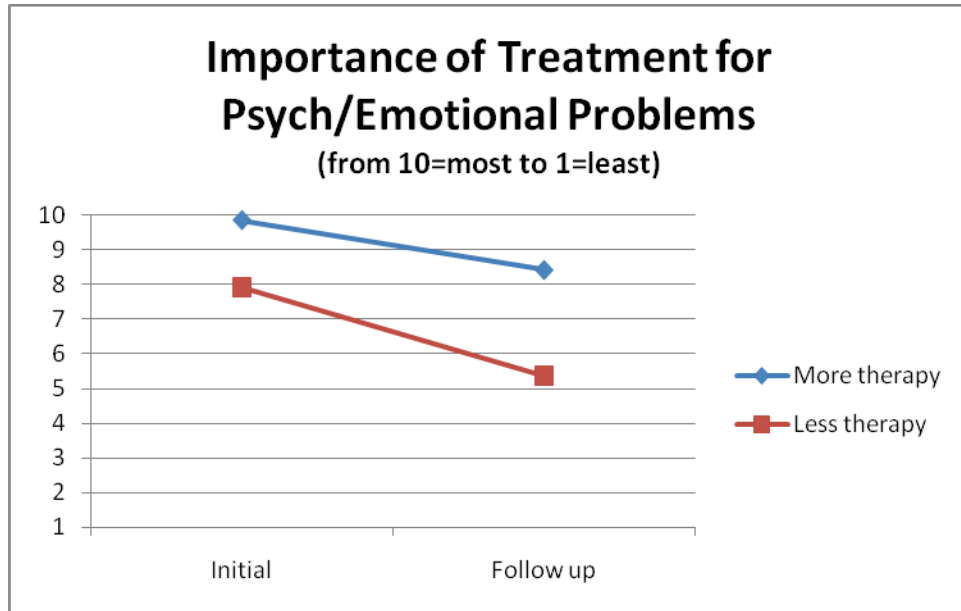
- Clients with more therapy reported greater reductions in the problems they had with family ( $p=.005$ ) than those who had the minimum amount of therapy during the study period. Clients with the minimum amount of therapy also improved along this dimension although the difference was not statistically significant, probably due to small sample size.



- An analysis of clients' perception of their psychological or emotional problems by the amount of therapy they received yields similar results. Those who had more therapy reported a greater reduction in these types of problems after participation in the program ( $p=.001$ ). Again, those with the minimum amount of therapy also showed improvement.

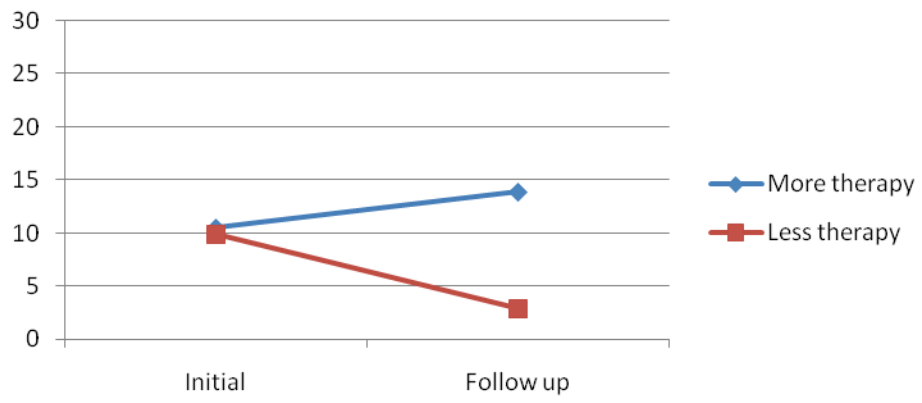


- For the importance of receiving treatment for psychological or emotional problems, clients who had more therapy reported less need after participation in the program ( $p=.047$ ). Those who received less therapy also showed improvement to a slightly greater degree as indicated by the steeper slope between the initial and follow up measures ( $p=.047$ ).



- Results for the analysis of the number of days clients reported having medical problems in the last 30 days show a slight increase for those who had more therapy and a significant decrease for those with less therapy ( $p=.054$ ). It could be that clients are attending more sessions because they have a greater need and are dealing with more serious medical issues that increase over time despite treatment.

## Number of Days with Medical Problems in last 30 days

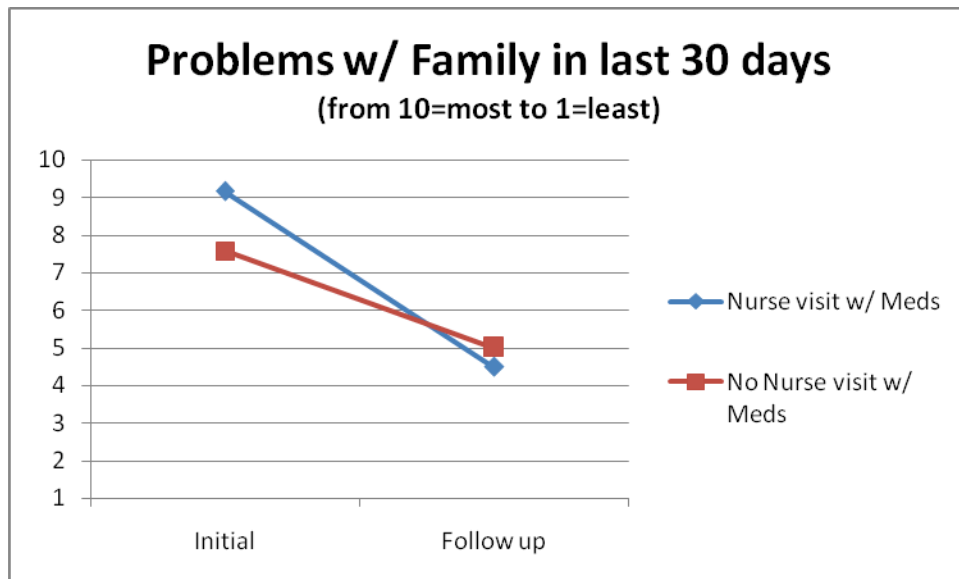


## Medication Related Nurse Visit

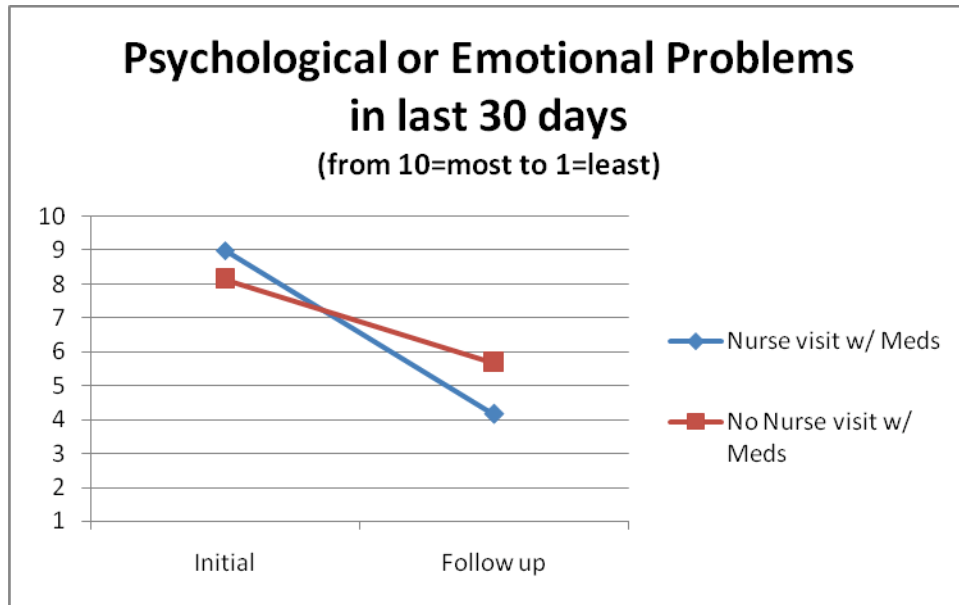
To further analyze the impact of the treatment received, the sample was split into those who had visited a nurse for medication related treatment (n=6) and those who had not (n=15). Again, there was improvement between initial and follow up measures for both groups for most outcomes. Those who had visited the nurse experienced greater improvement in **problems with family in the last 30 days** and **problems with psychological or emotional states in the last 30 days**.

The only exception, also seen in the analysis for those with more therapy, was that those who went to the nurse for a medication related visit had more days with medical problems out of the last 30. Again this could be related to the severity of the health conditions and related life experiences being endured by the clients who are directed to the nurse for help with medication.

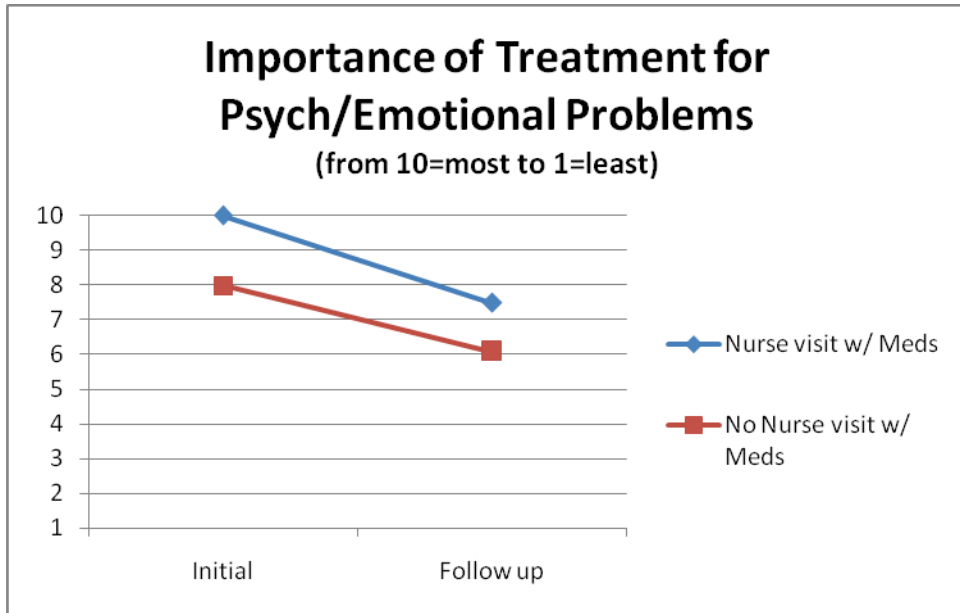
- Clients with visits to nurse for a medication related visit reported greater reductions in the problems they had with family ( $p=.028$ ) than those who had no visits to the nurse during the study period. Clients with no visits to the nurse also improved along this dimension although the difference was not statistically significant for this small sample size.



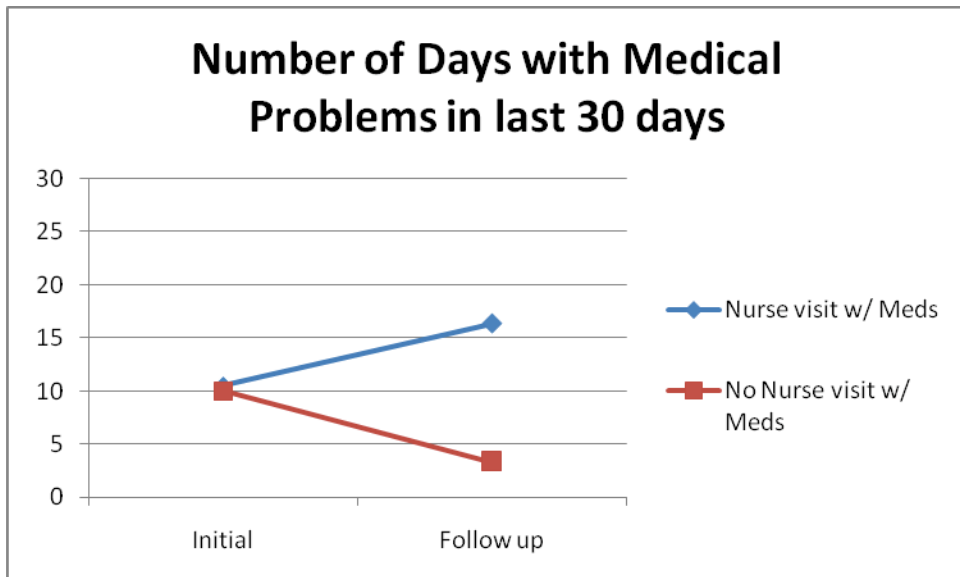
- An analysis of clients' perception of their psychological or emotional problems by whether or not they visited the nurse yields similar results. Those who visited the nurse reported a greater reduction in these types of problems after participation in the program ( $p=.001$ ). Again, those with no visits to the nurse also showed improvement in this area ( $p=.06$ ).



- For the importance of receiving treatment for psychological or emotional problems, clients who had visited a nurse reported less need after participation in the program. Those who did not visit the nurse showed about the same improvement ( $p=.047$ ).



- Results for the analysis of the number of days clients reported having medical problems in the last 30 days show an increase for those who visited a nurse and a significant decrease for those who had not ( $p=.032$ ). Again, clients may be visiting the nurse because they have a greater need and are dealing with more serious medical issues that increase over time despite treatment. These individuals may need more intensive care in addition to harm reduction therapy and treatment.



## PERCEIVED IMPACT AS A RESULT OF PARTICIPATION IN HARM REDUCTION PROGRAM

Individuals who participated in the follow up measure were asked how much in agreement or disagreement they were with statements about how their participation in the program impacted them. The statements are listed below:

As a result of having participated in the program, I . . .

- feel less sad or depressed
- have had fewer health problems
- have had fewer problems with the law
- have been more careful using protection during sex
- have had better access to services to help with problems
- have had fewer problems related to substance use
- feel my life is much more stable
- feel my life is healthier
- feel more satisfied with my personal relationships
- have been able to deal with my problems better

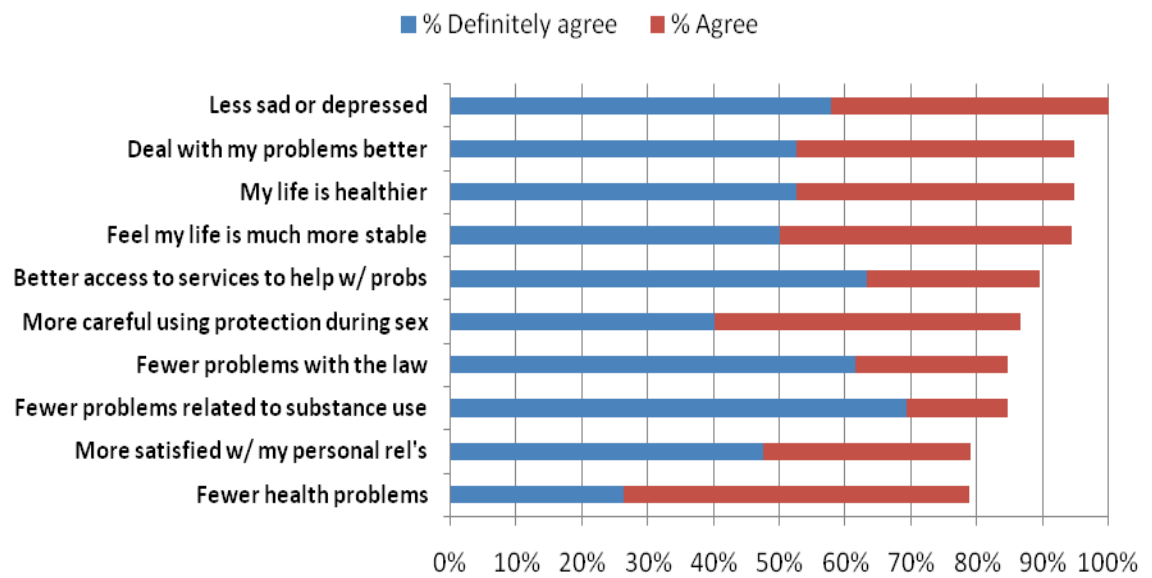
Overall, participants perceived that they were favorably impacted by their participation. All of the statements received high levels of agreement with close to 8 or more out of ten who *definitely agree* or *agree*. Nine or more out of ten *definitely agreed* or *agreed* that they:

- ✓ feel less sad or depressed
- ✓ have been able to deal with their problems better
- ✓ feel their life is healthier
- ✓ feel their life is more stable
- ✓ have better access to services to help with their problems

For those who had problems with substance use, seven out of ten *definitely agreed* that they had fewer substance use related problems since their participation in the program.

The program appears to be perceived as particularly helpful in accessing services. Just over six out of ten *definitely agreed* that they "have had better access to services to help with problems" as a result of their participation in services.

## Perceived Impact of Participation in Program



## **APPENDIX – Pre and Post Treatment Assessment Instruments**