EFFECTIVE CORRECTIONAL PROGRAMMES

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I. INTRODUCTION

There are a wide variety of programmes that purport to provide effective treatment for the needs of offenders. However, only programmes that have been evaluated with appropriate research methodologies and which demonstrate a reduction in recidivism should be considered for implementation. Many programmes have been designed without adherence to the principles of risk, need and responsivity, as defined by Andrews and Bonta (2002), and therefore may not provide the most effective treatment.

To determine which programmes are most likely to produce reductions in recidivism a number of authors have conducted extensive reviews of the programme outcome literature through the use of meta-analysis (for example, Andrews et al. 1990; Gendeau, Little & Goggin, 1996; Lipsey, 1995; Lösel, 1995). The results from these reviews suggest a set of characteristics that can be used to judge the quality of a programme.

While research has shown positive effects of treatment on offender behaviour there remains a need for high quality research to support and further guide programme developers. In particular, programme research is needed to demonstrate which programmes are effective across cultures and to identify those programme characteristics that may be sensitive to cultural differences. In addition, not all correctional jurisdictions are able to put in place extensive programming regimes and research is needed to demonstrate the best approaches to use when resources are limited.

II. WHAT WORKS IN PROGRAMMING

Meta-analysis has also been used to identify the programme elements that are most likely to have an impact on recidivism. A number of meta-analyses have shown similar results (Andrews et al. 1990; Gendeau, Little & Goggin, 1996; Lipsey, 1995; Lösel, 1995), but the study by Andrews et al. (1990) illustrates the conclusions.

Andrews et al. (1990) reviewed 154 correctional treatment evaluation studies and classified the programmes they evaluated into one of four treatment groups:

(i) Criminal sanctions:
Studies in which there was a variation in the sentence, but no variation in the rehabilitation component. In these studies, options comparing more vs. less probation, or probation vs. incarceration were compared to determine which produced a lower rate of recidivism.

(ii) Inappropriate correctional service:
These studies were not consistent with the risk/need principles. These studies provided intervention for low risk offenders and used non-directive relationships based on psychodynamic counselling. Other kinds of interventions included in this group were group counselling programmes that did not use pro-social modelling, non-directive educational and vocational programmes and programmes like Scared Straight, designed to discourage continued criminal activity by showing what prison is like.

(iii) Appropriate treatment:
These options included delivery to higher risk offenders and used behaviourally oriented interventions. They also compared rates of response and included a small number of non-behavioural studies that

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addressed criminogenic needs.

(iv) Unspecified treatment:
This was the fourth category and was used where the treatment was unspecified, or could not be classified as either appropriate or inappropriate.

The authors compared the recidivism results across the different programme types and the results of the analyses are summarized in Table 5. The effectiveness measure used was the Phi coefficient, a measure of association, in this case demonstrating the impact the programme type had on recidivism. A positive number indicates the programme decreased recidivism, while a negative number indicates the programme increased recidivism. As can be seen in Table 1, programmes that followed the risk/need principles and were structured and behavioural in content have the highest Phi coefficient. Studies that evaluated the use of criminal sanctions or used programme elements that were described above as being inappropriate either had no effect, or increased recidivism.

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<th>Type of treatment</th>
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<tr>
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Summarizing the outcome of a number of meta-analyses, Gendreau (1996) has proposed a set of eight principles of effective programme design. Listed below are the principles, with examples of how they are applied in programmes currently being delivered at the Correctional Service of Canada:

1. The risk and need levels of offenders are specified and used in selection of participants and criminogenic needs are targeted.
   Offenders admitted to the Correctional Service undergo an extensive assessment of their risk and needs. Risk is assessed by both dynamic and static risk factors to identify those offenders most in need of programming. The areas of programming they require are identified by the needs assessment and only those needs identified as relevant to the offender are addressed through programming. The assessment takes between two and three months and includes a review of court and police documents, interviews with the offender, and specialized assessment in areas such as substance use, education and learning, mental health, sexual offences and violence.

2. Programmes are highly structured with content and contingencies under the control of the facilitators, not the participants, and antisocial attitudes are not reinforced.
   All programmes have structured manuals that define the objectives and activities for each session. Programme facilitators must follow the defined programme and must not change how the components are taught. All of the programme components are covered consistently every time the programme is completed and participants are unable to lead the programme off-track to meet personal goals that may be inconsistent with the programme goals. Examples of pages from a well-structured programme manual are presented in Figure 1.
Figure 1: Example from the Aboriginal Offenders Substance Abuse Program Manual (Correctional Service, 2006)
3. Account for the response rate of participants.

   For example, highly structured programmes are most appropriate for offenders who are not effective at conceptualizing ideas; higher levels of interpersonal interaction are required for high anxiety offenders; and additional contingencies are put in place for offenders who have low motivation.

   Core programmes are cognitive behaviourally based to meet the learning needs of offenders. They include skill development exercises that make use of role playing and practice. In addition, specialized programme options are available for women and Aboriginal offenders. These programmes address the different impacts that criminal behaviour has on these groups and provide programming that is socially and culturally appropriate for the offenders’ needs. Offenders requiring high-intensity programming are often less motivated to participate. Therefore, to encourage their continued participation more than one facilitator is used to better engage the offender in the programme. These programmes also make use of one-on-one counselling, in addition to highly structured group work, as a method of maintaining the motivation of the offenders.

4. Offender characteristics are matched to staff; including personal characteristics (gender, age, life experiences, training) and relationship styles (empathy, fairness, firmness, spontaneity).

   Through training, programme facilitators are encouraged to show empathy and understanding of the offenders’ challenges while at the same time remaining firm on the programme objectives and avoiding the reinforcement of antisocial attitudes. In the case of Aboriginal programmes, Aboriginal people are used as facilitators to better match offenders and facilitators in terms of cultural backgrounds.

5. Positive reinforcers outnumber punishers by a ratio of 4:1.

   Training sessions demonstrate how to deliver positive reinforcers during group sessions to encourage both positive change in behaviour and participation in the programme activities.

6. Intervention periods of three to nine months are used since shorter periods do not provide sufficient time for relationships to develop and there is need for time in the treatment setting to practice the interventions learned.

   High intensity programmes last three to four months, or longer, to provide sufficient time for the offender to integrate the ideas that are discussed. For moderate and low intensity programmes the duration is less than recommended here, but this is overcome by the use of maintenance programmes that are delivered after the completion of the main programme. The maintenance programmes may be delivered in the institution or in the community to reinforce the concepts learned in the programme and to further encourage the offender to make the changes needed to address their needs.

7. Programme staff are adequately trained with an understanding of the theory behind the intervention; they are provided with time to become experienced and familiar with the programme content before delivering it; and smaller programmes (number of locations where the programmes are being delivered) are often observed to be more effective.

   Training of facilitators can take up to two weeks and refresher courses are also offered. The programme manuals and training plans outline in detail the theoretical models for the programmes and explain the programme details. Training usually requires that facilitators deliver sample lessons from the training manual and participate, as would an offender, in the programme lessons taught by other facilitators. The hands-on experience with the programme materials ensures in-depth knowledge. All facilitators are evaluated at the end of training to determine if they have achieved sufficient knowledge and understanding of the programme prior to being able to deliver the programme in an institution or in the community. Ongoing follow-up monitoring of the facilitators is part of the programme quality control.

8. Assessment and evaluation of the programme is on-going and integral to the programme so changes in behaviour and attitudes can be measured, skill development can be assessed and programme outcomes can be demonstrated.

   Prior to the start of most programmes an assessment battery, consisting of a structured interview, questionnaires and standardized assessment tools are completed. During the programme and at its end,
these assessment tools are completed again to determine if there have been changes in the offenders’ knowledge, attitudes, beliefs etc. Results of these assessments are used first by the facilitators to ensure that the programme is achieving its objectives. These assessment results are also accumulated and used in research, with additional data on release outcome, to determine if the programme is effective in changing recidivism and improving the release options of offenders.

In addition to these principles, Gendreau argues that the following components are important for successful interventions:

(i) Pro-social attitudes and behaviours are reinforced during treatment sessions;
(ii) Pro-social behaviours are modelled, or demonstrated, in treatment;
(iii) Role playing and practice of learned behaviours is needed;
(iv) Focus on skill development;
(v) Relapse prevention is included in the programme training.

In addition to identifying the characteristics of effective interventions, Gendreau offers the following summary of interventions that are not effective with correctional populations:

(i) Programmes that rely on psychodynamic therapies requiring high levels of introspection, self evaluation and good verbal skills;
(ii) Nondirective therapies in which antisocial attitudes are not challenged and groups in which criminal attitudes and behaviours are reinforced;
(iii) Treatment strategies that rely on punishment, such as ‘boot camp’, intensive supervision, and shock incarceration;
(iv) Programmes that externalize blame, fail to develop empathy for the victims of crime and are directed at venting anger towards the system, or that only accept self-motivated offenders;
(v) Programmes that provide intensive services to low risk offenders.

A final point on the effectiveness of programming: a study recently completed for the Correctional Service (French & Gendreau, 2003) looked at the impact of correctional programming on offenders’ behaviour while offenders were still in custody. The findings demonstrate that with increased programme options institutional incidents decline. That is, with programming, correctional institutions become safer places.

III. EXAMPLES OF TREATMENT APPROACHES

Four treatment approaches will be presented in this section, stages of change, relapse prevention, motivational interviewing and harm reduction.

A. Stages of Change

Prochaska and DiClemente (1992) propose a model of readiness to change that allows treatment providers to match treatment to an individual’s willingness to change. In their model, they propose five stages of change and provide examples of what should be addressed at each stage and what is required for the person to move to the next stage (Connors, Donovan & DiClemente, 2001). These stages are meant to be representative of what happens and individuals will not pass through the stages as if they were discrete events.

(i) Pre-contemplation

In the pre-contemplation phase an individual has no intent to change his or her behaviour and the behaviour may be viewed as being both positive and negative for the individual. During this phase it is not useful to focus on changing behaviour, but rather to use motivational techniques that will move the person to the next phase. The person may need to acknowledge that there is a problem, develop a better understanding of the negative consequences of the behaviour, and develop an understanding of the factors that trigger it. An individual at this stage may believe they are in control and can stop anytime and believe that the benefits of using outweigh the benefits of not using.

(ii) Contemplation

In the contemplation stage the individual is thinking about their problem and is looking for information that will help them to understand it. They are looking at the positive and negative characteristics of the behaviour, but they are not yet prepared to stop it. Intervention at this stage involves providing increased
understanding of the effects of the behaviour, evaluation of life goals and consideration of the context in which the person may be living. In the case of offenders, if they are incarcerated it is a good opportunity to point out the negative impacts that being in prison have on their life and what the alternatives might be.

At this stage, the person must make a decision to act if they are to move to the next stage. They might begin to take some preliminary action such as meeting with a counsellor, changing their behaviour, or reducing the risks associated with it.

(iii) Preparation
The third stage is preparation for change. Persons in this stage are prepared to change both their attitudes and their behaviour. They may have taken some early steps to monitor their behaviour with the goal of reducing the frequency of it. They are ready to be encouraged to participate in treatment so intervention should work to increase their commitment to stopping the behaviour. This can be done by further development of information on the consequences of the behaviour and the positive benefits they may experience by reducing it or stopping completely.

At this stage individuals will need to establish goals and priorities that can be set to help them stop the negative behaviour. They will need to develop a change plan that can guide their efforts to change.

(iv) Action
In the action stage individuals have begun to change their behaviour. They are learning new skills that help them to remain free from the negative behaviour. Their desire to change at this stage makes them ideal candidates for programmes that apply behaviour change practices in treatment. Treatment needs to provide skills development that will assist in the cessation of the behaviour while providing alternatives to their former lifestyle. Participants also need to learn about what may trigger their negative behaviour so that they can avoid these situations.

Prochask and DiClemente (1992) suggest that interventions in this stage should last for an average of six months, and work is needed with the individual to increase their belief that they can maintain the desired changes in behaviour.

(v) Maintenance
The final stage in this model is maintenance, the process by which the individual maintains his or her desired behaviour. This is a critical phase as it is the one that must last for the remainder of a person’s life if they are to avoid resuming their former ways. They must have in place practices that will allow them to avoid substance abuse and continue to practice the skills learned in treatment. Very often, treatment programmes do not provide for maintenance support. Rather, the programme is delivered, the person successfully completes it and then is expected to maintain the change without any additional support. Effective programmes have maintenance components that provide support and skills reinforcement during the maintenance stage.

An individual does not move through these stages in a straight line. They may move from pre-contemplation to preparation, only to slip back to the contemplation stage. Or, they move all the way to maintenance, but as a result of life circumstances, may find themselves starting the process again (Connors, Donovan & DiClemente, 2001). This is both expected and normal and is one of the reasons that effective programmes stress the need for understanding of lapses in drug and alcohol use during and after treatment.

B. Relapse Prevention
Relapse prevention should be an important component of treatment programmes. As noted earlier, relapse is a common occurrence and the individual needs to be prepared for it when it occurs. The goals of relapse prevention are to provide information useful in recognizing high risk situations that may lead to relapse and providing the skills needed to deal with the relapse when it does occur. At the time of a relapse, it is important that the client does not give up.

Seven models of relapse are identified by Connors, Donovan and DiClemente (2001), but there is a consistency across the approaches they present. The model presented by Marlatt and Gordon (1985) is based on cognitive behavioural principles and is a good example to use here. In this model, relapse is seen as
the interaction between the high risk situations associated with the behaviour and the individual’s perceptions of his or her ability to control the situation and therefore to avoid the behaviour. The individual’s expectations about the usefulness of the behaviour in the particular situation will also play a role in whether or not they choose to relapse (Connors, Donovan & DiClemente, 2001).

When the high risk situation arises, the individual who has learned coping skills to deal with the event or environment will be more likely to resist the relapse. The coping skills that have been learned will provide alternative courses of action which hopefully will avoid the relapse. Individuals who have not learned appropriate coping skills will be less able to choose alternative behaviours and therefore will be more likely to return to the undesired behaviour.

For the Marlatt model, there are two key components that must be addressed during treatment; identifying high risk situations and developing coping skills to deal with them in a positive way. Treatment programmes that use relapse prevention spend time helping the offender to identify their unique high risk situations through review of past events and their outcomes. Events that consistently lead to the behaviour become the targets for developing coping strategies.

Developing coping strategies follows the identification of the high risk situations. For each high risk situation the offender must identify a number of alternative ways of dealing with the risk created. For example, if meeting with friends in a large group is a high risk situation, then coping strategies might include avoiding being with friends in large groups, leaving the group when it gets large, or finding alternative activities that are normally done only in small groups of two or three people. Other coping strategies that have been identified in the research literature include: reminders of the consequence of the behaviour, thinking about the positive effects of avoiding the behaviour, recalling positive periods without the behaviour, and remembering that avoiding the behaviour is an important personal goal.

The coping strategies are identified on an individual basis following discussion in groups. After identification of coping strategies, they must be practiced in role play activities. Through the identification of high risk situations, development of coping strategies and practicing the strategies, the offender is better prepared to deal with the situations when they occur.

Relapses are to be expected and may be viewed as learning experiences. Analysis of the relapse events, the antecedent behaviours and the results, will assist in the development of more effective coping strategies that can be used during the next high risk situation. Following the relapse, or lapse, the client needs to be reassured that they can continue without the behaviour. The treatment programme should include discussion of what to do after a relapse and how to restart the process of avoiding the behaviour. This is one of the main reasons for the importance of treatment maintenance programmes. It is during the maintenance sessions that lapses and relapses can be addressed in a supportive environment.

C. Motivational Interviewing

Miller and Rollnick (1991) state that “motivational interviewing is a particular way to help people recognize and do something about their present or potential problem. It is particularly useful with people who are reluctant to change and ambivalent about changing.” (p. 52)

Many offenders are not willing to commit to changing their negative behaviour. There are too many positive features associated with their lifestyle. They are in the pre-contemplative stage of change. However, treatment providers must work to encourage these individuals to move forward along the continuum towards change. Motivational interviewing is one of the methods that have been shown to be effective for starting the change process.

Miller and Rollnick (1991) present five general principles of motivational interviewing.

(i) Express empathy

For motivational interviewing to be effective the counsellor must express empathy with the client. The client is accepted for what he or she is at the time of counselling, there is no judgment about how they arrived at that point, or the consequences of their behaviour. Accepting the individuals as they are reduces their resistance to the counselling setting. Ambivalence about change is acceptable for the client.
(ii) Develop discrepancy
Developing discrepancy has to do with gently demonstrating the conflicting values in a person's life and guiding them towards the more appropriate goals. This is different from confrontation that may result in resistance to change. While discussing the current situation with the client the counsellor looks for positive personal goals that the individual has and contrasts these with the current behaviours that prevent the achievement of these goals. The object is to encourage the client to see the importance of the alternative goals they have and to give these greater priority than the desire to use drugs and alcohol.

(iii) Avoid argumentation
The counsellor needs to avoid argumentation to maintain a positive therapeutic relationship with the client. However, this does not mean that the therapeutic interview follows the clients’ thoughts. Rather, inconsistencies are detected and used to correct judgments and beliefs. Miller and Rollnick (1991) refer to this as “soft confrontation”. They also note that in many treatment settings argumentation can occur around the need to admit to having a problem. This is unnecessary at this early stage of change, and may only be recognized as a goal much later. Recall that the purpose of motivational interviewing is to prepare the client for change, to move them along the continuum so they are ready to start the change process, or in some cases after a relapse, to restart the process.

(iv) Roll with resistance
It is to be expected that the offender will be resistant to change, and it is the job of the counsellor in motivational interviewing to work with this resistance to find ways to reframe and redirect the resistance. Redirecting the resistance can motivate offenders to find their own solutions, which is the ultimate goal of the programme.

(v) Support self-efficacy
The offender will often feel that they are unable to succeed in treatment so it is pointless for them to try. Motivational interviewing helps the offender to believe that they can change; it works with their desire to change and develops confidence that change is possible. The counsellor may encourage small steps towards change to assist the offender to build on success.

Motivational interviewing is often used as an adjunct to other therapies. An offender who is in the pre-contemplative or even the contemplative stage of change is not ready for a directive behavioural programme. Motivational interviewing can move them along so they better understand the need for change, see the value it may provide for them, and provide the belief that they have the ability to maintain the behaviour if they desire. Miller and Rollnick (1991) also point out that results from an assessment process can be an effective tool during motivational interviewing. A parole officer reviewing the results of objective testing can provide the offender with concrete evidence of how his or her behaviour compares to that of other offenders.

The report produced by the Correctional Service of Canada’s Computerized Assessment of Substance Abuse (CASA) is designed to be shared with the offender for this reason. It is our intention, in the near future, to include normative data in the report, so offenders can see how their problem compares to that of other people. This approach should help to address problems of denial that are common among drug and alcohol abusers.

D. Harm Reduction
Harm reduction is a concept that grew from awareness of the deadly consequences of injection drug use following the appearance of HIV/AIDS. Through the very common practice of sharing syringes and other drug paraphernalia it became possible for an individual to suddenly have an incurable, fatal disease. People working with drug abusers recognized the need to take some action that would lessen the probability of the spread of disease without passing judgment on the drug using behaviour. From those origins, harm reduction has become a strategy for dealing with the behaviour and consequences of all types of substance abuse and is applicable to other behaviours as well. The approach is often misunderstood and rejected outright by some decision makers and programme delivery experts due to a lack of understanding of the approach.

Harm reduction is more than a number of specific interventions. It is an approach to intervention that seeks to reduce the negative consequences of substance abuse to the individual and to the society. Rather than looking at drug or alcohol misuse as an inherently bad thing, harm reduction takes no position on the
acceptability of the behaviour. However, it recognizes that substance abuse has negative effects and therefore actions can be taken to reduce those harms. Simply reducing the harms may help to stabilize the behaviour of individuals, assist in keeping them alive, and reduce the negative consequence for the community in which the substance-abusing individual lives.

Harm reduction is not a treatment programme, but an intervention. However, one of the values of harm reduction is that it can provide opportunities for further intervention with addicted individuals that may lead to their participation in more traditional programming, thereby leading to a reduction in their use of drugs and alcohol, and in many cases to their total abstinence from drug and alcohol use, if that is warranted.

Marlatt (1998a) provides a more detailed picture of harm reduction approaches in different countries as it relates to different substances, populations and challenges. Marlatt (1998b) provides a set of five principles for harm reduction (pp. 49 - 58):

(i) Harm reduction is a public health alternative to the moral, criminal and disease models of drug use and addiction.

Harm reduction does not presume that substance abuse is morally wrong and must therefore be punished using criminal sanctions, nor does it take the view that substance abuse is a disease that requires treatment. However, given the negative consequences of substance abuse, encouraging people to stop using is a goal as indicated in the next principle.

(ii) Harm reduction recognizes abstinence as an ideal outcome, but accepts alternatives that reduce harm.

Harm reduction can be viewed as having a continuum of responses. At one end of the continuum is the cessation of all substance-abusing behaviours, thereby eliminating all of the harm associated with substance abuse. At the other end of the continuum is any small reduction in the harms caused by substance abuse. Frequently, harm reduction becomes associated with only the most controversial options such as safe injection sites. While safe injection sites are at the leading edge of harm reduction, they are not the place to start developing a harm reduction policy. Correctional systems can take a harm reduction approach by ensuring that its policies and procedures go as far as they can to reduce the harms associated with substance abuse.

(iii) Harm reduction has emerged primarily as a ‘bottom up’ approach based on addict advocacy, rather than a ‘top-down’ policy promoted by drug policy makers.

As a result of how the harm reduction approach was developed, it is well accepted and meets the needs of people who require intervention.

(iv) Harm reduction promotes low-threshold access to services as an alternative to traditional, high-threshold approaches.

Traditionally, many programmes required a commitment to total abstinence before a person could be accepted into treatment. If there was drug or alcohol use during the programme the person was removed from treatment. These types of strict rules set a high threshold for participation. Programmes that have low-threshold access have very few rules for initiating and participating in the intervention. Effective needle exchange programmes do not require anything of the substance abuser other than collecting clean syringes. It is easy to imagine a needle exchange programme that required participation in treatment, completion of forms, etc. to obtain clean needles. Experience has shown that any of these requirements reduces the effectiveness of needle exchange. Another example of a low threshold programme is a methadone treatment programme offered in Halifax, Canada, in which there are a minimum number of requirements for participation, unlike most methadone programmes. Individuals in this programme must obtain their methadone each day, and must undergo urinalysis to check for the presence of other drugs. The presence of other drugs results in counselling, and cessation of methadone only occurs if the level of use of other drugs is seen as a threat to health.

(v) Harm reduction is based on the tenets of compassionate pragmatism versus moralistic idealism.

Making condoms available in correctional settings is one example of compassionate pragmatism. We recognize that sexual activities will occur in prison, we want to prevent the spread of diseases, and providing condoms does not provide any security risk, therefore they are made available.
Harm reduction approaches are not only applicable to treatment after an addiction or problem behaviour has occurred. Harm reduction approaches can be applied to prevention programmes as well. Recognizing that there is safe and unsafe behaviour associated with an activity and promoting the safer action is one way to reduce harm. Programmes to reduce drinking and driving are an example of harm reduction programmes at the prevention level. These programmes recognize that people will consume alcohol away from home, and to reduce the likelihood of accidents, provide alternatives to driving. These alternatives include taking a taxi, arranging for a designated driver, or staying overnight at the location of the event.

**IV. PROGRAMME RESEARCH**

Determining what works and developing an evidence based correctional approach requires an understanding of research and its importance. Ideally, a correctional agency will have, at least, a small number of research staff who can carry out research projects and maintain knowledge of new and developing trends in the research world. Where research staff are not available, efforts are needed to build relationships with universities and colleges to encourage research in corrections that is consistent with local cultural and social norms.

**A. Research Needs**

Research requires the systematic collection of information, but this information can serve more than one person. Basic information on when offenders are admitted to an institution and when they leave can be useful for research. Assessment information for offenders may not only assist in ensuring services are delivered appropriately, but can assist correctional management in planning and developing their correctional systems.

To conduct research on an intervention, it is necessary to know what is being evaluated. That is, it must be possible to describe the programme or intervention and the intervention must be applied consistently so all participants receive the same service. It is not possible to effectively evaluate programmes that are constantly changing since one will never know what is producing the observed results.

With knowledge about the offender population being studied it is possible to subset the population to look at how the intervention impacts different groups. Under the responsivity principle we would expect differential effects for subgroups of the population. Therefore, knowing the population allows one to determine who the programme works for. Examples of characteristics one might look at are age and gender, risk and need, type of crime committed and level of motivation.

The third requirement is for measures of outcome. Outcome measures are the things that you hope to change through the intervention. Early in the programme development cycle the behaviours that are being targeted for change should be clearly identified and these behaviours should be monitored. In correctional settings, the easiest behaviour to measure is recidivism. While this is often a relatively crude measure, it is the goal of most programming to reduce the commission of new offences. Measuring recidivism then is the key element in evaluating correctional programmes.

However, waiting until recidivism occurs can take a long time and often estimates of the effectiveness of programmes are needed earlier. In addition, there is value in determining if there are immediate impacts of a programme on attitudes and behaviour, impacts that may be reduced over time. Intermediate measures of outcome can be very effective in understanding which parts of a programme or intervention are effective, and in new interventions, can identify problems early in the development process. Intermediate measures of outcome might include assessment of attitudes to determine if there was change, assessment of understanding and learning to determine if the information presented has been understood, and assessment of the level of programme participation and programme performance.

For a correctional organization without a strong history of research support it can be challenging to convince senior managers of the value that research can provide. When resources are limited, and funds used to pay for research must be taken from programme funds, it is easy to decide that research is an unnecessary luxury. However, research helps to answer fundamental questions, and can actually lead to increased efficiencies in the operation of the correctional system. Providing programming is expensive and knowing who it works best for, under what conditions, and what intensity of programming is needed, increases the probability that resources will be used in the most efficient manner.
Research helps to eliminate programmes and interventions that do not have an impact on the offender. Many interventions have little or no impact on offender behaviour and yet are continued at great cost because management does not know the impact.

B. Measuring Recidivism

The effectiveness of a correctional intervention is frequently measured using recidivism. However, defining what is meant by recidivism is important as there are a number of factors that influence the rate of recidivism that is observed.

In the United States recidivism is often measured by using arrest information. This is available in a national database from their national police, but it must be remembered that arrest does not mean conviction. Therefore, in the U.S., recidivism rates may appear higher than in other countries that use convictions as a measure of recidivism. In Canada, recidivism is usually measured in terms of convictions because the national police force maintains an extensive database containing all convictions for criminal offences. It is necessary when reading research reports, and when writing reports, to be clear about the type of measure being used to calculate recidivism.

Other factors that can affect the recidivism rate include the length of the follow-up period, the status of the offender during the follow-up period, and the types of offences included in the measurement of recidivism. The length of the follow-up period is the most critical factor in studies that report recidivism rates. Short follow-up periods will often result in evaluations making a very weak programme look successful, as the offenders have not had time to commit additional crimes, or more accurately, to be detected by official sources (the police) for having committed a new crime. For this reason, studies that report recidivism with a follow-up period of less than six months are not very useful. The minimum period of follow-up should be one year, and two years is much better. To determine the length of the follow-up period needed one must also consider the type of offender being studied. For example, sex offenders who have child victims must be followed for extended periods of time, as their recidivism generally takes longer to show in official records.

The status of the offender during the follow-up period is also important. An offender who is being supervised in the community on parole will be more likely to be detected for having committed new offences than one who is not being supervised. Therefore, studies using supervised and unsupervised offenders must be careful to correct for the different probabilities of detection.

Finally, there must be a determination of what types of offences will be included in the recidivism measure. Frequently, offences that receive fines only, or very short sentences (less than 30 days), are not included in follow-up data collection, particularly if the group being studied has in the past been convicted of serious offences. It is necessary to ask if a conviction for a minor assault that results in five days in jail should be considered a failure, or a slip that does not help to understand the problem being investigated.

Follow-up periods may be fixed or variable. Studies with fixed follow-up periods may include periods after the sentence has been completed. Variable follow-up periods are often used when a group of offenders with different release dates are used in a study, but the study must conclude on a particular date. The problem with variable follow-up periods is that those released last will have the shortest follow-up periods and therefore, will have lower recidivism rates. If the type of offender is associated with the time of release in the study and variable follow-up periods are used, then results could be biased.

Alternative measures of recidivism have been used in many studies such as return to custody and failure of conditional release. While these are not truly recidivism measures, as they do not require that a crime be committed, they are useful measures of criminal tendencies for research on programme outcomes. It may be that keeping an offender in the community for an additional three or four months is a positive outcome. Return to custody as a measure of outcome is very simple to obtain with a correctional system where all admissions are recorded centrally. An alternative to return to custody is a measure of failure on conditional release such as parole. This outcome measure is intermediate, and may not result from new offending, but it does reflect deterioration in behaviour in the community.

In research conducted by the Correctional Service a combination of measures of outcome are frequently
used. The most basic measure is return to custody, and this provides information on how well the offender
did after release. However, it is also useful to know if the return to custody occurred as a result of parole
violation or as a result of a new criminal conviction, therefore we also collect this information. It is possible
to refine the measure of recidivism by looking at the type of new offence, such as whether it was a new
violent offence, or non-violent offence. Sometimes it is useful to know if the new offence is similar to
previous offences or reflects a change in behaviour that may be indicative of positive outcomes.

Measuring recidivism as a percentage of offenders committing new offences in a fixed period of time is
useful, but there are more effective measures that provide additional information. For example, survival
analysis provides information on how long offenders remained in the community, the rate of failure over the
full range of the follow-up period and provides statistical tests for comparing different groups. How survival
analysis helps in the evaluation of a treatment programme can be seen in the following example. A
programme is evaluated and the final recidivism rate is the same for both groups after two years. However,
survival analysis might reveal that failures in the untreated group occurred mostly in the early part of the
sentence; while for the treated group failure occurred in the latter part of the follow-up period. If one only
looks at the overall rate it would appear that the intervention had no effect, but the survival analysis would
reveal a very real effect, keeping some offenders out of prison for a longer period of time.

V. PROGRAMME EXAMPLES

A. Women Offenders Substance Abuse Programme

The Women Offenders Substance Abuse Programme (WOSAP) has been developed over two and half
years and will be implemented in women's correctional facilities in Canada in June of 2003. The programme
has a number of unique characteristics that represent attempts to design a programme consistent with
evidence based programme development (Hume & Grant, 2001).

First, the programme was designed through consultation with women offenders, experts in women
offender treatment, and operational staff at correctional facilities. Early consultations with international
experts indicated the programming we had available did not adequately meet the needs of women offenders.
Following a decision to develop a new programme, additional consultations were held to determine the
programming model that was to be used and the structure of the programme (Hume & Grant, 2001). In its
design and development, the programme was to be women-centred, not a derivation of a programme for
men, and was to address the unique characteristics of women with substance abuse problems.

The second feature of the programme is that it takes account of the entire sentence. Rather than a
programme that lasts for set period of time, the programme is designed to deliver elements throughout the
entire sentence, and do this in a consistent manner. While we refer to it as a single programme it is actually
four programmes.

The third feature of the programme is that it tries to combine two approaches to treatment that have in
the past been seen as incompatible. To meet current standards of effective correctional programming the
programme needed to have a cognitive behavioural component that would encourage skill development for
addressing substance abuse problems. However, experts in women’s programming advised that the
problems of substance abuse for women are often entangled with relationship issues and if these are not
addressed then it is likely the programme would not be successful. The challenge has been to combine these
two approaches within one programme.

As noted above, the programme has four major components:

(i) Education

The education component of the programme has eight sessions designed to teach women about the
negative effects of substance abuse on their lives, both long and short-term effects; to provide basic
information on how to deal with triggers that cause cravings; and to motivate them to continue the process
of change. It is anticipated that all women offenders will be assigned to participate in this component of the
programme as almost all women offenders have a connection to the problems of substance abuse either
through their own experience, or through a spouse or family member.
(ii) Intensive treatment
The intensive treatment component consists of two parallel programmes; one designed from a cognitive behavioural perspective and one based on relational theory. These programmes proceed in parallel so issues discussed in one part are also discussed in the other, ensuring consistency of message and learning. Each programme is 20 sessions in length.

(iii) Maintenance
The maintenance component is a 20 week follow-up programme with sessions offered once a week. To ensure continuity with treatment in the community the same maintenance programme is available after offenders are released. This approach ensures there is a consistent experience in both the institution and the community. One of the major challenges we face with the programme is how to deliver the maintenance session in the community when the women participants are widely dispersed across the country.

(iv) Community building
The community building component of the programme is designed to create an environment within the institution that promotes a drug and alcohol free lifestyle and provides support to those offenders who are trying to change their behaviour. This component has two characteristics; peer led discussion groups and institution-wide activities. The peer led discussion groups have programming material available, but the participants choose the topic to be discussed each week. The community-building exercises include health activities involving correctional staff, social activities, and community activities in which individuals from outside the prison come to present information of relevance to the women.

A preliminary analysis of the results from this programme was very favourable. The research indicated that the women in the programme believed the programme met their needs, the retention rate in the programme was high, and there were changes in knowledge and attitudes observed after the programme was completed (Furlong & Grant, 2006; Grant, Furlong & Hume, 2007). Results associated with release have not been completed yet.

B. Intensive Support Units
In an attempt to provide environments for offenders that will support their efforts to reduce drug and alcohol dependency, Intensive Support Units (ISU) have been established in all prisons (Grant, Varis & Lefebvre, 2004). These units are part of the regular prison environment, but they provide increased assurance that drugs are not available. Offenders wishing to live in the units must sign an agreement in which they accept increased testing for the presence of drugs and increased searching for drugs and alcohol. The staff of these units receive additional training in the problems of substance abuse and the challenges faced by offenders with an addiction. With the training, staff can provide additional support to the offenders when they experience problems.

To evaluate the effectiveness of the units, participants completed a number of surveys when they first joined the units and again when they moved to other prisons or were released. Intermediate measures of the impact of the units indicate that both staff and inmates believe the units will make a difference in their ability to stay away from drugs and alcohol, that the units will have a positive effect on their lives after release from custody, and that the units have fewer drugs available. Analyses of misconduct and search data for the units indicates that there are increased searches, but few drugs are found and misconduct by offenders in the units is lower than that of offenders in other units (Varis, 2001). Release outcome measures indicate that offenders who participated in the ISU were released earlier, remained in the community longer, and were less likely to be readmitted to prison (Grant, Varis & Lefebvre, 2005).

C. Methadone Maintenance Treatment
Methadone maintenance treatment has been available to offenders in the Correctional Service for a number of years. However, until recently only those offenders who had been prescribed methadone in the community could receive it in an institution. Recently, a study was conducted to compare the release outcomes of offenders who had participated in the methadone maintenance programme and a comparison group consisting of those offenders who had not participated in the methadone programme.

Previous research has indicated that methadone maintenance treatment can produce reductions in illicit opiate use (Marsch, 1998), reductions in other drug use (Fischer et al., 1999), HIV risk behaviours (Darke,
Kaye & Finlay-Jones, 1998), criminal behaviour (Coid et al., 2000; Maddux & Desmond, 1997), and access to health care (Marsch, 1998). The purpose of this study was to determine if we could identify a reduction in criminal behaviour after release from prison for those offenders who participated in the MMT programme.

One of the challenges in research of this type is to determine who should be in the comparison group. The offenders who receive MMT are the most seriously addicted offenders and generally the most problematic. They have a high rate of recidivism so comparing them to the general population of offenders would certainly indicate that MMT had no effect. We were able, within our data systems, to identify a group of offenders who tested positive for opiates in random drug testing and who were identified at admission as having a substance abuse problem. This group served as a comparison for the MMT group.

The results of the study are summarized in Figure 2 in the form of a survival analysis. The survival analysis indicates that both groups had a high probability of failure in the community. While more than 50% of the MMT group was readmitted to prison within 24 months of their release, almost 65% of the comparison group were readmitted. The observed differences are statistically reliable. Similar results were identified when new offences were used as the outcome measure, but the results were not statistically reliable.

D. High Intensity Substance Abuse Programme (HISAP)

The HISAP is an example of a programme that was designed to meet the needs of offenders with the most serious problems, in this case, serious substance abuse problems. The programme includes 90 sessions and takes three to four months to complete. It takes the work of two facilitators to maintain the attendance of offenders in the programme as these offenders are some of the most resistant to treatment. The research on the programme indicated that most participants remained for the full programme, and that those who left the programme early were the most likely to reoffend (Grant, et al., 2003).

Outcome results from the research indicated that programme participants were released earlier in their sentence than a comparison group, were more likely to have received a discretionary release (day parole or full parole), and spent more time in the community after release. They were less likely to commit a new offence after release than those in the comparison group.

V. SUMMARY AND CONCLUSION

Correctional treatment programmes have been shown to be effective in reducing recidivism. By reducing recidivism, programmes can reduce the cost of correctional operations by shortening the time that offenders

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1 HISAP is now known as the high intensity component of the National Substance Abuse Program (NSAP-High).
need to remain in prison. In addition, reducing recidivism reduces the overall number of crimes that are committed and makes communities safer.

Not all programmes will be equally effective in reducing recidivism and research is needed to determine which programmes will actually reduce recidivism. Using meta-analysis, researchers have identified the characteristics of programmes that are most likely to have a positive impact on recidivism. Ensuring that programmes have these characteristics is one means by which correctional administrators can increase the probability of finding effective programmes.

This paper presented the results from a number of studies of effective programmes that are consistent with the characteristics of effective programmes, and that were designed with the principles of risk, need and responsivity (Andrews & Bonta, 2002). These programmes illustrate both how to design effective programmes and how to conduct research that will demonstrate their effectiveness. When resources are scarce, it is necessary to find those interventions that will have an effect and use these only. Unproven interventions should be discontinued, or used on a very limited basis while they are being evaluated.

Finally, some caution needs to be exercised in transferring programming interventions from one cultural context to another. It is expected that the principles presented here will apply across a wide variety of cultures, but this has not been demonstrated empirically. As new programmes are developed, based on the principles presented, they should be evaluated and the results of these evaluations should be shared through research and management networks.
REFERENCES


