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## Family intervention in a prison environment : a systematic literature review

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#### Abstract

**Background:** The prison population in England and Wales is approximately 85,000 and elevated rates of mental health difficulties have been reported among the prisoners. Despite frequent recommendations advocating the application of family interventions to optimise prisoner outcomes, the evidence for its use and impact in prison remains unclear. **Aim:** To conduct a systematic review of published literature on family interventions in prisons.

**Methods:** Embase, PsychINFO, and Medline were searched using terms for family interventions and for prisoners or young offenders. No limit was imposed on study design, but, for inclusion, we required that papers were written in English and published in peer reviewed journals.

**Results:** 983 titles were retrieved. Twenty-two met criteria for inclusion. Three were case studies, 12 were descriptive, 6 were quasi-experimental and one was a randomised controlled trial. Interventions and study methods were too heterogeneous for meta-analysis. All studies gave positive conclusions about family interventions, but empirical data on effectiveness were slight.

**Conclusions:** Consistency in findings across the wide ranging studies suggested that family therapies may indeed be helpful for prisoners and their families, so further research is warranted. The fact that an RCT proved feasible should encourage researchers to seek more robust data and to determine which form of intervention is effective in which circumstances. It would be useful also to develop an improved understanding of mechanisms of change.

## Keywords

Family intervention; prison; carers; mental health

# Introduction

Since the emergence of family and systemic psychotherapies in the 1960s (Rasheed et al., 2011), a growing body of research has shown the importance and effectiveness of involving families in treatments for a range of relationship issues and health conditions. These include eating disorders, addictions, psychosis, domestic violence, and parenting issues (Pinsof et al., 1995; Association for Family Therapy & Systemic Practice, 2015). The importance of working in partnership with families within mental health services is also embedded in government policies (Department of Health, 2011) and international treatment guidelines (Gaebel et al., 2005).

Notwithstanding guidance from professional bodies on terminology (e.g. Association for Family Therapy & Systemic Practice, 2015), different terms are commonly used in the literature to refer to family work - including psycho-educational, family education, family support, family therapy, and family interventions. Family treatments comprise several different strategies, which may include forming alliances with family members, helping family members to communicate difficult thoughts and experiences with one another and promoting helpful change in relatives' beliefs, patterns of behaviour and relating to one another (Association for Family Therapy & Systemic Practice 2015; Pharoah et al., 2010). Given the lack of agreement on terms used to describe family approaches and the variability in provision across clinical conditions, treatment and settings (Eisler, 2005), for the purpose of this review we have opted to use the unitary term 'family intervention' to encompass different terms and approaches.

The important role that families can play in the treatment of individuals with mental health conditions (Meis et al., 2013) has underpinned the development of service initiatives within community settings that integrate greater involvement of families in treatments (Burbach & Stanbridge, 2006). Despite government policy promoting equivalence of care in prisons (HM Inspectorate, 2007), however, prison mental health care has enjoyed much less development in implementation of family intervention services (Liddle, 2014). Family interventions could be particularly relevant given the elevated rates of common mental disorders (Singelton et al., 1998; Brugha et al., 2005; Prins, 2014) and schizophrenia spectrum conditions in prisoners (Brugha et al., 2005, Jarret et al., 2012), the numbers of individuals with severe mental illnesses who access mental health services through the criminal justice system (Ghalli et al., 2013), and the history of offending behaviours recorded in early psychosis samples (Marion-Veyron et al., 2015).

Understanding of the devastating impact on children of parental separation by imprisonment is improving (Murray & Farrington, 2008; Wildeman 2014). Regardless of mental health needs, imprisonment has a negative impact on family relationships, including reduced access to social support, stigma, and shame (Murray, 2005). Reoffending rates are significantly lower amongst individuals who maintain close and supportive familial relationships (Visher et al., 2003), including regular family visits (Cluley, 2009). Prison settings can offer an opportunistic environment to engage individuals in treatments (Harvey, 2010). Thus, greater use of family interventions in prison is often recommended (Klein et al., 2002).

## Aims of the review

Our aim was to identify, summarise and critically evaluate published research on family interventions in a prison environment, for any prisoner irrespective of mental health status.

Our research questions were:

- i) What are the characteristics of studies that have investigated family interventions in prison populations?
- ii) What type of family interventions have been delivered and by whom?
- iii) What outcomes detailing the efficacy and effectiveness of family interventions in a prison population are reported ?

# Methods

## Inclusion and exclusion criteria

A broad classification for 'family intervention' was employed. All studies with a reported focus on family functioning and relationships, and either involving family sessions and/or individual interventions that explicitly focused on family relationships were included. Family intervention amongst all prisoner groups were included.

We included studies only if they had been published in English and in peer reviewed journals, and included (i) participants who were prisoners or young offenders, and (ii) participants who were incarcerated in a prison or equivalent institution throughout. Exclusion criteria were (i) articles focusing on secure health service settings (mainly because people in such services are detained under mental health legislation, and their release dependent on their recovery, while release from prison is not0; (ii) studies completed with sex offenders alone (as they tend to be under a specific sex offender treatment programme); (iii) studies describing family interventions with offenders in community settings.

#### *Search strategy*

The databases Embase, PsycINFO and Medline were searched in April 2015. Studies for review were identified following a keyword search for the terms 'family therapy', OR 'family intervention' AND 'prisoner', OR 'delinquent', OR 'offender', OR juvenile delinquency'. Appropriate truncations and wild cards were used to identify mutation of the terms searched, e.g. prison\$ to search for prison, prisons, prisoner, prisoners.

Subsequently, reference lists of all accepted articles were searched to identify any relevant articles that may have been missed by the electronic search strategy. Grey literature was searched using Google, GoogleScholar, and Dissertation Abstracts International to counteract publication bias. In line with the PRISMA statement (Moher et al., 2009), duplicates were removed and online titles and abstracts were reviewed for the remaining articles. Articles that did not meet the inclusion criteria were excluded, and the full text was obtained for potentially eligible articles.

## Quality criteria

All articles selected were evaluated to assess methodological rigour, and risk of bias, using an extraction sheet based on the Cochrane Consumers and Communication Review Group data extraction template (<u>http://cccrg.cochrane.org/author-resources</u>). Two independent reviewers (AR and JO) rated the articles, blind to each other, using the extraction sheet. The level of agreement between the raters was 100%.

### Insert Figure 1 near here.

Figure 1 shows the outcome of the selection process. The database searches initially identified 983 records. After removal of duplicates and exclusion based on the criteria detailed above, 15 studies remained. A manual search of the references of these 15 papers

yielded 7 further papers suitable for inclusion in the review. Twenty–two papers in total met criteria for inclusion into the review. Table 1 provides a summary of included studies.

#### Insert Table 1 near here.

#### *Case reports*

There were three case reports reporting a total of fifteen different cases, all from the USA and exclusively with male prisoners, and where the focus was on the clinical descriptions (Chaiklin, 1972; Cobean & Power, 1978; Ostby, 1968). Each described their focus as supporting the individual and their family to accept the reality of their situation and promote family adjustment; two used a group family treatment programme (Chaiklin, 1972; Ostby, 1968) and the other an individual intervention with the prisoner and his family unit. Information on who delivered the interventions was limited; Chaiklin (1972) reported facilitation by social workers, Cobean & Power (1978) listed 'prison counsellor' and Otsby (1968) a psychiatric social worker, in consultation with a senior staff psychiatrist.

Indications of the beneficial effects of the interventions were noted by all authors, pointing to their success in establishing adequate family adjustment (Chaiklin, 1972; Cobean & Power, 1978), helping to establish plans for release, and facilitating more meaningful family relations, including less violent modes of interaction (Ostby, 1968). Only one study offered quantitative data on recidivism for prisoners, reporting four of 165 men in receipt of the intervention returned to prison (Chaiklin, 1972).

## Descriptive studies

Twelve of the twenty-two studies were best categorised as descriptive, with their main focus on providing commentaries about the area, description of therapies and discussion of implementation issues. They were from the USA and included male and female adult offenders. Four papers focused on specific subgroups in prison; for example, African American prisoners (King, 1993; Selling, 2003), adolescents with conduct disorder (Keiley, 2002) and incarcerated mothers and caregiving grandmother prisoners (Engstrom, 2008).

Four of these papers detailed the use of multiple-family group interventions (Keiley, 2002; Engstrom, 2008; Millard & McLagan, 1972; Wilmer et al., 1966), two described couples or family therapy (Kaslow, 1978; 1987) and four advocated integration of different interventions in a multi-systems approach (King, 1993; Nash, 1981, Rose et al., 1996; Van Voorhis, 1987). The remaining papers proposed the introduction of family work as part of an overall rehabilitative effort (Selling, 2003; Rieger, 1973). They described a range of aims for the family interventions, including strengthening family communication and the conflict resolution processes, enhancing stress management skills (e.g. Engstrom, 2008) improving the structure and functioning of the family (e.g. Millard & McLagan, 1972), and facilitating open communication and handling readjustment issues (e.g. Kaslow, 1978). Information was again limited on who delivered these interventions, with seven papers failing to record the professional delivering the intervention or only describing them in broad terms such as 'family worker' (Rose et al., 1996) 'treatment staff' (Keiley, 2002) or 'group workers' (Millard & McLagan, 1972). Wilmer et al. (1966) reported use of counsellors, correctional staff and psychiatric nurses.

Only two papers within this section offered provisional conclusions about outcomes including improvements in family ties (Wilmer et al., 1966), and attachment and affect regulation strategies (Keiley, 2002). They also reported several difficulties in implementing interventions within the prison settings, including collaborating with prison staff (Keiley,

2002), reluctance from families to become involved, financial issues (Millard & McLagan, 1972; Rose et al., 1996), and problematic substance use complicating the intervention (Engstrom, 2008).

#### Quasi experimental studies

Six studies were quasi experimental in design, together including 206 participants, in a range of 4 to 73 participants per study. They were all from the USA, with male and female inmates, and four of them focused on young offenders (Perkins-Dock, 2001; Hagan & King, 1992; Keiley, 2007; Slavet et al., 2005). All studies used a pre-post design, comparing family intervention with no treatment (Bayse et al., 1991), treatment as usual (Hagan & King, 1992), and one-person family intervention (Perkins-Dock, 2001); the remainder did not include comparison groups (Keiley, 2007; Slavet et al., 2005; Fox, 1996).

In terms of approaches, one study used the 'family check-up' intervention, which is based on motivational interviewing principles designed to improve parental awareness of risk behaviours in their children and support for implementing interventions to help with these difficulties (Slavert et al., 2005). Two other studies used brief strategic family therapy (Perkins-Dock, 2001; Fox, 1996). The studies using group interventions also used role play techniques alongside cognitive behaviour modification strategies (Hagan & King, 1992; Keiley, 2007), with a focus on improving dysfunctional attachment and affect dysregulation. The remaining study used a psychoeducational intervention based on a cognitive-systems approach (Bayse et al., 1991), emphasising healthy attitudes to family functioning and improving communication and negotiation skills. The interventions were reported as being delivered by a range of professionals – including prison mental health staff (Bayse et al.,

1991), social workers (Hagan & King, 1992), master's level family therapists (Keiley, 2007), and students (Slavert et al., 2005; Fox, 1996).

Two studies reported reoffending rates as an outcome. Less than 50% of the young participants in these studies were no longer incarcerated at 6 month and 2 year follow-up (Hagan & King, 1992; Keiley, 2007), which was reported as being considerably lower than the national norm. One study noted that 'a significant number of individuals' who received the intervention obtained subsequent convictions and had further contact with the courts, although these new offences were defined as minor in comparison to their original crimes (Hagan & King, 1992). Other outcomes reported included reductions in inmate distress and substance misuse, externalising and internalising problems (Keiley, 2007), significantly lower narcissism scores amongst inmates who completed the family life education course (Bayse et al., 1991) and family outcomes. Examples of the latter included improvements in family functioning and perception of adaptive attitudes (Fox, 1996) and increased parental confidence to influence their adolescent's behaviour at post-assessment (Slavet et al., 2005). Keiley (2007) reported improvements in adolescent and caregiver affect regulation from pretreatment to follow-up. In his comparison of a conjoint and one-person family intervention, Perkins-Dock (2001) found that the conjoint intervention resulted in change of the more family-oriented constructs of cohesion, organisation and home environment, whereas the oneperson intervention affected change in the more individually-oriented constructs of selfesteem, depression, control and impulsivity.

Important difficulties in the delivery of the family interventions were reported, including problems in providing feedback to offenders and parents (Slavet et al, 2005) and the need to adapt to the prison's rules (Bayse et al., 1991).

#### Randomised controlled trial

The review yieldedonly one randomised controlled trial. This was conducted at two shortterm detention facilities in USA, with 154 young men and women (Liddle et al., 2011). The study used an adapted form of multidimensional family therapy – (MDFT) (Liddle, 2010) delivered by MDFT-trained clinicians, and compared recipients with a group receiving 'enhanced services as usual'. Eligible participants were aged between 13-17 years, incarcerated with known substance misuse problems, and co resident with at least one parent that was willing to engage with active intervention; 90% of 170 potential participants referred agreed to take part. They were assessed using a combination of dialogue based diagnostic interviews. Treatment fidelity, was measured in terms of the required number of sessions to constitute 'a dose', defined a priori. The random allocation procedure was not reported. There was superior treatment enrollment and retention in the MDFT arm, with 87% of adolescents and their families retained in treatment for 3 months or more compared to only 23% of adolescents in the enhanced services as usual. In the MDFT intervention, higher satisfaction with treatment services in the MDFT group was also reported by participants. Further, MDFT clinicians reported greater collaboration with juvenile justice professionals along with there were higher levels of collaboration between MDFT clinicians and juvenilejustice professionals which, in itself, was associated with decreases in substance use and delinquency in the community. Ninety-two percent of participants in the MDFT activeintervention were identified as having received the full intervention dose. In the enhanced services as usual group, only 24% received their expected dose of treatment. of those in the enhanced services as usual group. No measures of reoffending rates were detailed. Difficulties in implementing family interventions in the prison environment were highlighted,

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including the obstacles in meeting with families in crowded, security conscious settings. The authors highlight the need for further work to outline specific implementation issues.

## Discussion

We sought to identify and evaluate studies of the involvement of families in the treatment of prisoners. Specifically, we investigated the type of family intervention undertaken, the professionals delivering these interventions, and reported indications of their impact. Twenty-two papers were identified from the review process. All reviewed studies were from the USA and most merely described the intervention implemented, showing the several different models of family intervention have been tried in prisons. There were limited data on the specialist skills and training profile of professionals required. Further work reporting on distinctions between manualised testable interventions are indicated.

All included studies pointed to or commented on the beneficial effects of family interventions with prisoners, but only two studies identified reductions in reoffending rates as outcomes amongst prisoners who had engaged in family intervention (Hagan & King, 1992; Keiley, 2007) and observed *evidence* in support of such work was scarce. Although many papers made recommendations for family services in prison, there appeared to have been minimal advances in the body of research undertaken in the 1970s. It was of interest that several studies referred to themselves as 'pilot studies' (e.g. Perkins-Dock, 2001; Keiley, 2002; 2007) or made recommendations for future studies to build on previous research (e.g. Hagan & King, 1992), yet there was no published evidence of these developments having occurred.

The lack of empirical research in this area may reflect the problems in delivering interventions within a prison environment. Common difficulties noted by several studies included limited engagement with families, high participant drop-out rates, prisoner concerns about confidentiality and practical barriers, such as lack of therapeutic room space or geographical distance that families travelled to visit the prison. Prisons are described as low-trust environments, which can negatively impact on prisoner willingness to engage in therapy (Harvey and Smedley, 2010). This is particularly the case if they have had previous negative experiences of working with individuals in perceived positions of authority, which may affect their ability to establish positive and trusting relationships. Shelton (2010) reports that there are potential conflicts in the relationship between healthcare and custodial staff. The brief time spent in prisons, with prisoners often being dispersed to other institutions at short notice, can also pose a barrier to effective therapeutic relationships.

### Limitations and concluding remarks

There were serious limitations as to what we could achieve with this review. First, we found little empirical data in the selected papers – and there was little consistency in study methods. The papers were comprised of individual case reports, descriptive and quasi experimental studies and one RCT. Secondly, no causal relationships could be established as to the efficacy and effectiveness of family interventions within a prison population. Although papers reported on the positive impact of families being involved in treatment, there were several sample, design and reporting limitations that were likely to have impacted on the results and had implications for their generalisability. Thirdly, all studies were undertaken with US samples. Given the differences in criminal systems between the USA and other countries (e.g. Kaufman, 1980), their relevance, applicability and generalisability to prison populations

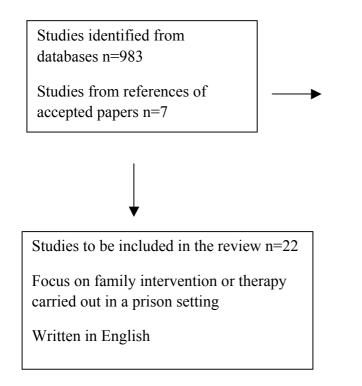
elsewhere remains unclear. Custodial sentences continue to represent the main approach to dealing with crimes in the United Kingdom.

In one sense, the heterogeneity of the studies cold be seen as an advantage, since, the positive impact of family interventions came through regardless of methods of study. Notwithstanding the richness and value of different data categories, a greater focus on generating larger datasets employing experimental designs that facilitate hypothesis testing and greater generalisation are indicated. Too many of the studies offered the evidence of the findings. In this context, Joan McCord's studies of counselling for young delinquents are telling; the counselled and counsellors were confident about the value of what they were doing, but on empirical measures, including re-offending, the counselled group did less well than the controls (McCord, 2003; McCord & McCord, 1959). In the current financial climate, an economic analysis of delivering the intervention would be essential, as would the inclusion of follow up data on recidivism rates and service usage, and, of course, ratings of the quality of relationships between the prisoner and his family members.

The recent work from Dodge et al (2015) and their innovative RCT, highlights the likely value of further research, suggesting that there is merit in early intervention and proactive approaches to reducing the risk of future offending and social exclusion amongst high risk groups. Services along these lines are being developed in the voluntary sector, providing help and information on coping with the impact of imprisonment on families and preparing for the release and resettlement of a family member from prison (Action for Prisoners, 2013), so it is vital to know for sure that this is money well spent. There is a great deal more work required not only to ensure that family interventions can play an appropriate role in optimising positive outcomes for prisoners, including those with mental disorders, their families, and

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ultimately, wider society, but also to help provide guidance on which kinds of interventions and which levels of expertise will be required for different subgroups.



Studies excluded from review n=968

Duplicate references n=210

Studies with juvenile delinquents in community or residential settings n=245

Studies with sex offenders n=62

Subject matter not appropriate n=395

Not available in English n=56

Figure 1. Summary of the search strategy and inclusion/exclusion process