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Randomised controlled trial of a service brokerage intervention for ex-prisoners in Australia

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ABSTRACT

Background: Health outcomes after release from prison are typically poor with elevated rates of morbidity and mortality widely documented. Under-utilisation of health services contributes to these outcomes, but interventions to increase health service utilisation in ex-prisoners are in their infancy and few have been rigorously evaluated.
Methods: Single-blinded randomised controlled trial of a service brokerage intervention (the 'Passports study') for N = 1325 adult ex-prisoners in Queensland, Australia. Participants in the intervention group received a personalised booklet summarising their health status and identifying appropriate community health services; trained workers made weekly telephone contact in the first 4 weeks post-release to identify health needs and facilitate health service utilisation. Participants in the control arm received usual care. Baseline data were collected within 6 weeks of expected release from custody with follow-up telephone interviews 1, 3 and 6 months post-release. Participant identities were linked with federal health service utilisation records, a national death register and corrective services records, two years post-release. The primary outcome was self-reported health service utilisation in the first 6 months post-release.
Results: Between 2008 and 2010 1976 prisoners were screened for eligibility, 1665 met eligibility criteria and 1325 were recruited; 665 were randomised to the intervention and 660 to the control condition. Participants were broadly representative of adults being released from prison in Queensland except that women were intentionally oversampled (21% vs. 11%).
Conclusions: Outcomes from this large RCT will provide the first robust evidence of the effect of service brokerage on health service utilisation and health outcomes for ex-prisoners.

1. Introduction

The world prison population is growing at a rate well in excess of general population growth with over 10 million adults currently in custody [1] and around 30 million moving through prison systems each year [2]. Despite their relative youth, prisoners often experience a range of complex and chronic health problems [3,4]. The prevalence of blood-borne

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viruses, particularly HIV and hepatitis C, is typically much higher than in the community [5,6]. The prevalence of mental illness is similarly elevated, particularly for post-traumatic stress disorder, psychotic disorders and substance use disorders [7–9]. A history of substance misuse is normative among prisoners in many countries [10] and a considerable number continue to use and inject drugs while in custody [11–13]. These complex and interconnected health problems are typically set against a backdrop of entrenched poverty and relative social disadvantage [14–16].

For many, health improves while in custody, where food and accommodation are provided in a highly structured setting, where drugs are less readily available, and where health services are provided at a level well in excess of that found in most communities [17,18]. However, when prisoners return to the community, they often return to pre-incarceration patterns of behaviour and associated health outcomes within a relatively short period of time [14,19–21]. This decline in general and mental health status can be life threatening. Ex-prisoners die at rates far higher than their community peers, particularly in the period immediately following release from custody, and overwhelmingly due to drug overdose or suicide [22,23]. Rates of hospitalisation for physical and mental health problems are similarly elevated [24,25].

There is increasing recognition of the need to support prisoners in the transition from custody back to the community, and of the centrality of health and social support services to this transition [26]. Although programmes supporting the transition from prison to community are becoming widespread in many developed countries, evaluations of these programmes have been few, and rigorous evaluations – particularly randomised controlled trials (RCTs) – fewer still [27,28]. One quasi-randomised trial of a pre-release programme in New York State found no impact on health outcomes and a *higher* rate of recidivism in the intervention group [29], underscoring the importance of rigorous evaluation and highlighting the potential for interventions to produce both positive and negative effects [30]. Evidence from more recent trials in the US, with various subgroups of prisoners judged to be high risk or high need, suggests that effective transitional programmes are distinguished by (a) the provision of tailored support *after release* as well as in custody, and (b) efforts to facilitate utilisation of existing community services ('service brokerage') [31–33]. However, the evidence base remains weak and few studies have been conducted outside the US. To this end, we aimed to determine whether post-release service brokerage was effective in improving health service utilisation and health outcomes in ex-prisoners in Australia. We undertook a RCT comparing the effect of a low-intensity service brokerage intervention and usual care on health service utilisation, health and offending outcomes following release from prison.

2. Methods

2.1. Study design

The Passports study was a multi-site, single-blinded RCT of a transitional intervention for sentenced adult prisoners returning to the community in Queensland, Australia. Participants were recruited within six weeks of expected release from custody and randomised to receive either usual care or a transitional intervention including personalised service brokerage in the first four weeks post-release. The primary outcome was self-reported health service utilisation at 1, 3 and 6 months post-release. Additional outcomes of interest included self-reported general health, mental health and health-related quality of life during the first six months post-release; and health service utilisation and reincarceration within two years of release, based on linkage with routinely collected data. The design of the trial is depicted in Fig. 1.

2.2. Study setting

Queensland is Australia's second largest state, covering an area of more than 1.7 million km^2 (664,000 $mile^2$). The state capital is in the south-east corner where two-thirds of the population of approximately 4.5 million reside. Indigenous people comprise 3.2% of the Queensland population [34] but 29.7% of adult prisoners [35], and the majority of prisoners in the north of the State. The Passports study recruited participants from August 2008 to July 2010 in the seven Queensland prisons identified by Queensland Corrective Services (QCS) as those from which the majority of sentenced prisoners were released. This included four prisons in south-east Queensland (three male, one female) and three prisons in north Queensland (two male, one female).

At the time of the study a number of transitional supports were available for prisoners in Queensland, although none had been evaluated. For a small subset of prisoners identified as having serious mental illness and high needs, intensive transitional support was provided both pre- and post-release by the Prison Mental Health Service (PMHS). Those who (a) had served at least 12 months in custody and (b) were sexual/violent offenders or assessed as being at high risk of reoffending, were eligible for the Transitions Programme, which was a modular release preparation programme involving in-reach by community agencies. The remainder (and the majority) of sentenced prisoners were eligible for the Transitional Support Service (TSS), which consisted of a single consultation with a QCS 'Transitions Manager' to prepare a release plan. A small minority, with particularly high needs, were also eligible for the Offender Reintegration Support Service (ORSS), which involved post-release support provided by trained case workers.

The Passports intervention was designed to complement rather than duplicate these programmes.

2.3. Inclusion and exclusion criteria

To maximise generalisability, eligibility criteria were as inclusive as possible. Inclusion criteria included (1) sentenced adult prisoner expecting to be released (full-time or on parole) from one of the seven recruitment prisons within the next six weeks, (2) judged safe to be approached, and (3) able to provide informed, written consent. Exclusion criteria included (1) on remand (due to uncertainty around release), and (2) having previously participated in the trial (necessitated by the high rate of recidivism in the population). We intentionally over-sampled women to increase the sample size for sex-stratified analyses. To permit identification of and adjustment for sampling bias, we obtained demographic and offending information from QCS for all sentenced prisoners