An out-of-court community-based programme to improve the health and well-being of young adult offenders: the Gateway RCT

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Disclaimer: This report contains transcripts of interviews conducted in the course of the research and contains language which may offend some readers.

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Scientific summary

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Scientific summary

Background

Young adults represent a third of the United Kingdom (UK) prison population and are at risk of poor health outcomes including drug and alcohol misuse, self-harm and suicide. Those aged between 18 and 24, who have been questioned as suspects in relation to a low-level offence, may need to attend court and, if convicted, face penalties such as imprisonment. However, other means aimed at preventing young adults from reoffending exist. Court diversion interventions aim to reduce the negative consequences of some types of criminal sanctions and focus resources on addressing the root causes of offending. Although diversions are widely used in the UK, evidence of their effectiveness in terms of health outcomes has not yet been established using robust research methods. Hampshire Constabulary (HC), working with local charities, developed the Gateway programme, an out-of-court disposal aimed at improving the life chances of young adults.

Objectives

The aim of this study was to evaluate the effectiveness and cost-effectiveness of the Gateway programme issued as a conditional caution (intervention) compared to usual process (court appearance or a different conditional caution).

The study objectives were to:

1. Examine the effectiveness of the Gateway intervention on: (1) health and well-being including alcohol and substance use, (2) access to and use of health and social services and (3) quality of life, among young adult offenders.
2. Explore the views and experiences of victims.
3. Assess the quantity and quality of the Gateway intervention as delivered in the study and the generalisability of the findings.
4. Identify and measure relevant consequences, both cost and benefits, of the Gateway intervention compared with usual process.
5. Examine the effectiveness of the Gateway intervention on recidivism.

Methods

Design

The study undertook a pragmatic, superiority RCT with two 6-month internal pilot phases and qualitative evaluation: an economic evaluation was planned. Participants were randomised using a 1 : 1 allocation ratio to either the Gateway conditional caution (intervention) or disposal as usual to a court summons or a different conditional caution to Gateway (usual process). The qualitative evaluation aimed to capture the experiences and perceptions of the impact of the intervention on participants, the police, victims and those delivering the intervention.

Participants, setting and recruitment

Eligible participants were those aged 18–24 who had committed low-level offences and resided within Hampshire and Isle of Wight (IoW) area. Participants were recruited by Police investigators during processing for an offence. Potential participants were offered a chance by the police to receive the Gateway caution, and those interested were invited to take part in the study. Police officers obtained Stage 1 consent and carried out an eligibility check, after which those eligible were automatically

randomised to receive either a Gateway caution or follow the usual process, such as court appearance or a different conditional caution. Qualitative interviews were undertaken with trial participants, police officers and those delivering the intervention.

Sample size

There is no widely accepted and established minimal clinically significant difference for the primary outcome, Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). A change of three or more points is likely to be important to individuals. There is also variation in the standard deviation (SD) of the WEMWBS with estimates ranging from 6 to 10.8 with the pooled estimate of 10 across all studies. Assuming 90% power, 5% 2-sided statistical significance, mean difference of 4 points on WEMWBS and a SD of 10, 266 participants were required. Conservatively, assuming a 20% attrition rate, the study aimed to recruit and randomise 334 participants.

Interventions

The Gateway programme, issued as a conditional caution, required participants to undertake a health and social care needs assessment, attend workshops encouraging analysis of their behaviour and its consequences, and agree not to reoffend during the 16-week caution. Usual process was disposal to a court summons or an alternative conditional caution.

Outcomes

The primary outcome measure was the WEMWBS. Participants self-reported WEMWBS at 4-weeks, 16-weeks and 1-year post-randomisation. Secondary outcomes were health status [Short Form 12 questionnaire (SF-12)]; alcohol [Alcohol Use Disorders Identification Test (AUDIT)] and drug [Adolescent Drug Involvement Scale (ADIS)] use; type and frequency of reoffending (police data); and health and social care resource use (self-reported).

Statistical methods

The original plan, pre-specified in version 1.0 of the SAP, was to carry out a repeated measures, mixed-effects linear regression model with the WEMWBS score at 4-weeks, 16-weeks and 1-year post-randomisation as the dependent variable, adjusting for treatment group, time, group by time interaction, total number of records management system incidents and police national computer convictions 1-year prerandomisation, age at randomisation, Index of Multiple Deprivation quintile at randomisation, pandemic time period and standard of usual process available as fixed effects. Recruiting site was to be adjusted for as a random effect. However, due to the study closing early because of issues with retaining participants, a descriptive analysis was undertaken with no formal hypothesis testing. All outcomes were summarised descriptively by a randomised treatment group.

Qualitative evaluation

A qualitative evaluation was conducted to assess the implementation of the Gateway programme, including any related issues and observed benefits to the clients. Focusing on implementation, mechanisms and context, the research questions were:

1. How is Gateway being implemented?
2. What are the barriers to the implementation and effects of the Gateway programme?
3. What are the mechanisms through which the intervention brings about change?
4. How do different delivery methods (face-to-face/virtual/telephone) influence the above questions?

We conducted qualitative interviews and focus groups with a range of stakeholders across three time periods during the implementation of the Gateway programme.

Economic evaluation

A formal health economic analysis was not feasible. Health economic data are summarised descriptively with the trial data.

Results

Randomised controlled trial

We recruited 191 participants; 109 were randomised to Gateway and 82 to usual process. Although recruitment rates were within acceptable limits, the number of participants providing data [94 (32%) at week 4; 95 (34%) at week 16; 43 (28%) at 1-year] was insufficient to undertake any formal hypothesis testing and the trial was closed early.

The groups were generally well balanced in terms of characteristics and percentage providing data, but more of those providing valid data had a previous conviction than those who did not provide data. Similar percentages from each arm provided data with those attending interviews completing all sections. Telephone interviews were acceptable to those willing to share an active telephone number. Rates for those who were non-contactable were similar between the groups at all three time points.

Eighty-one of the 101 allocated to Gateway complied with the intervention. Reasons for non-compliance were reoffending and non-attendance at the LINX workshops.

Qualitative evaluation

Across 3 time points, 69 in-depth interviews were conducted with: 28 young people, 25 Gateway staff, 13 police recruiters and 3 focus groups with navigators. The researchers were unable to pursue interviews with victims as there were few offences with a victim.

Our findings showed that, following engagement with the Gateway programme, young people reported being better able to make decisions after engagement with the LINX workshops, while navigators played a significant role in enabling compliance and change among young people. The role of the navigator was akin to that of the mentor, providing practical support towards improved health including, for example, making and attending doctors' appointments with clients, as well as offering a listening role. Young people felt that, for them, the wider determinants (or 'areas') addressed with navigators, such as access to employment or improved health, were of greater importance than a reduction in reoffending. There was a polarity of needs among young people, which meant that all stakeholders valued the ability to tailor and adapt the programme to individual client's needs, also giving clients a sense of agency and control over their lives. The independence of the Gateway intervention team, from the police, was highly valued by young people. Factors related to communication were a concern for all, particular at the point of recruitment (by police) and between multiple delivery agencies.

Discussion

The problems encountered throughout this trial and the researchers' endeavours to overcome these problems provide valuable insights for colleagues seeking to design similar interventions and/or conduct studies with vulnerable populations in the police setting.

Co-production is essential for studies in the police setting. By working in close collaboration with HC, and their two project dedicated officers, the researchers were able to make pragmatic adjustments to the study design as issues arose. However, training an entire police force is fraught with difficulty even when supported by senior officers; competing interests precluded mandatory training for research purposes. The use of a two-stage consent process and a web-based eligibility and randomisation tool facilitate recruitment in the police setting, but frequent, regular need to use is required to maintain the study profile.

Young people who have committed an offence are known to be a difficult group to engage with generally, let alone in research. The study identified and tested implementation of different approaches to overcome this problem. Switching to telephone interviews produced a positive response. Persistence

and engagement paid off, but the study was unable to solve the problem of inactive mobile telephone numbers; an issue shared by the navigators and police. Independence of those delivering the intervention is important as perceived links with the police caused some disengagement. The collected data provide valuable information on attrition rates for health studies. Interestingly, allocation did not appear to make any difference to participation.

The study's qualitative evaluation highlighted the unmet health needs for this group of 18- to 24-year-olds, and the need to address the wider determinants of reoffending through individualised assessment. The Gateway programme was, however, developed for those with higher needs, which meant that flexibility and adaptability to suit individual needs was essential. It further highlighted the invaluable role of mentors in rehabilitative programmes such as Gateway.

The study has demonstrated that it is possible to recruit and randomise to a RCT in the police setting. The data that the study presents should be used to inform the planning of future trials, including anticipated attrition rates, and setting conservative targets for retention as well as recruitment rates. Internal pilots should be long enough to confirm recruitment and data collection rates are achievable over an adequate follow-up period. Given the challenges encountered, alternative study designs should be considered for the evaluation of interventions with a health-related outcome. These include: cluster RCTs where processes at individual cluster sites could be simplified; post hoc cohort studies which may address non-response and attrition bias; and regression discontinuity design (RDD), a quasi-experimental approach at lower risk of bias which has the potential to equate to a RCT.

Conclusions

This ambitious RCT and qualitative study provides information about an out-of-court intervention aimed at improving life chances, health and well-being and recidivism in young adults. Challenges encountered in participation and retention in this setting and the ways in which these may be addressed are described and will be useful in planning future research.

Study registration

This study is registered as ISRCTN11888938.

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