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THE EFFECTIVENESS OF THE OLDER PRISONER HEALTH AND SOCIAL CARE ASSESSMENT AND PLAN (OHSCAP): A RANDOMISED CONTROLLED TRIAL

Authors:

Mrs Katrina Forsyth
Research Associate, Offender Health Research Network,
University of Manchester, Manchester, England
Conflicts of interest: Nothing to disclose

Mrs Laura Archer-Power
Research Associate, Offender Health Research Network,
University of Manchester, Manchester, England
Conflicts of interest: Nothing to disclose

Dr. Jane Senior*
Senior Research Fellow, Offender Health Research Network,
University of Manchester, Manchester, England
Conflicts of interest: Nothing to disclose

Miss Rachel Meacock
Research Fellow, Manchester Centre for Health Economics,
University of Manchester, Manchester, England
Conflicts of Interest: Nothing to disclose

Dr. Roger Webb
Reader in Mental Health Epidemiology, Centre for Mental Health and Safety,
University of Manchester, Manchester, England
Conflicts of Interest: Nothing to disclose

Professor. Richard Emsley
Professor of Medical Statistics, Centre for Biostatistics,
University of Manchester and Manchester Academic Health Science Centre, Manchester, England
Conflicts of interest: Nothing to disclose

Professor David Challis
Director PSSRU and Associate Director NIHR School for Social Care Research
University of Manchester, Manchester, England
Conflicts of Interest: Nothing to disclose

Professor Jenny Shaw
Professor of Forensic Psychiatry / Consultant Forensic Psychiatrist
Offender Health Research Network, University of Manchester / Greater Manchester West NHS Foundation Trust
Manchester, England
Conflicts of interest: Nothing to disclose

Dr. Dawn Edge
Senior Lecturer, Division of Psychology and Mental Health
University of Manchester, Manchester, England
Conflicts of interest: Nothing to disclose

Dr. Elizabeth Walsh
Honorary Senior Lecturer (Research) Mental Health and Safety & Independent Health in Justice Consultant
University of Leeds until July 2015, University of Manchester from August 2015
England
Conflicts of Interest: Nothing to disclose

Dr. Stuart Ware

Chief Executive, Restore Support Network,
Dorset, England
Conflicts of Interest: Nothing to disclose

Dr. Adrian Hayes
Academic Clinical Fellow, Department of Psychiatry, University of Oxford and Oxford Health NHS Foundation Trust, Oxford, England
Conflicts of Interest: Nothing to disclose

Dr. Kate O'Hara
Formerly Research Assistant, Offender Health Research Network
University of Manchester, Manchester, England
Conflicts of Interest: Nothing to disclose

Professor Alistair Burns
Professor of Old Age Psychiatry/ National Clinical Director for Dementia and for Mental Health in Older People/ Consultant Old Age Psychiatrist
University of Manchester/NHS England/ Manchester Mental Health & Social Care Trust, Manchester, England
Conflicts of interest: Nothing to disclose

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SCIENTIFIC SUMMARY

Background:

Older prisoners

There has been a recent considerable increase in the number of older prisoners across developed countries. In England and Wales, people aged 50 and over currently account for 15% of the prison population, with 12,577 in this age group in prison.

The rise in the number of older prisoners is a consequence of a number of factors including an aging population and increases in the number of older people committing crimes; changes to sentencing practices; and enhanced forensic evidence resulting in greater numbers being convicted for crimes committed in previous decades.

Health and social care

There is no national strategy for the care of older prisoners. However, prisoners should have access to the same quality and range of health services they would receive in the community.

Older prisoners have multi-faceted health problems, yet there has been little research regarding the extent to which their physical and mental health needs are met. Older prisoners often have complex social care needs. Few studies have examined these needs but evidence suggests that older prisoners experience a lack of appropriate support in this area.

Current practice

The present, standardised, prison reception health assessment tool is designed to identify immediate health concerns, with a recommended second, more in-depth assessment conducted later. However, there are low completion rates for the second, non-mandatory health screen and it does not investigate social care need. There is no standardised older prisoner health and social care assessment in England and Wales, however some establishments have developed their own.

Intervention

The OHSCAP was developed and implemented as part of a previous study funded by the National Institute for Health Research (NIHR). An Action Learning Group (including prisoners, NHS staff and prison staff) at one prison in England developed the OHSCAP.

The OHSCAP is a structured approach for better identifying and managing the health and social care needs of older prisoners. The previous study showed that the OHSCAP was acceptable to prisoners and staff; could be integrated into current prison/healthcare processes and assisted effective multi-agency working.

The OHSCAP is paper-based and information collected is uploaded onto existing prison, health and offender manager systems. The assessment includes a series of open questions to facilitate discussion and is divided into three key parts; namely social, well-being and discharge planning. After the assessment, care plan and review sections allow facilitators to log and update their responses to identified needs.

The assessment is conducted one to two weeks after an older prisoner enters prison. The care plan should be completed in conjunction with the older prisoner and a copy of the OHSCAP should be offered to all participants.

Treatment as usual included the standard non age specific health assessment carried out at prison entry.

Objectives

Research questions:

1. Does use of the OHSCAP compared with treatment as usual (TAU) improve:

a) proportion of met health and social care needs;
b) health related quality of life;
c) depressive symptoms;
d) functional health and wellbeing and activities of daily living;

e) quality of health and social care planning;
f) cost effectiveness.

2. What are the facilitators and barriers to the implementation and operation of the OHSCAP?

Objectives:

1) To train prison staff to deliver OHSCAP
2) To implement OHSCAP in a number of prisons in England.
3) To evaluate the efficacy of OHSCAP in improving:
    a) the meeting of older male prisoners' health and social care needs (primary outcome);
    b) health-related quality of life;
    c) depressive symptoms; and
    d) functional health and wellbeing and activities of daily living.

4) To assess the quality of care plans produced through the OHSCAP.
5) To explore the experiences of older prisoners receiving the OHSCAP, and staff involved in conducting the OHSCAP.
6) To evaluate the cost-effectiveness of the OHSCAP as compared to TAU.

Method

Sample

Four-hundred and ninety-seven participants were recruited from within 10 prisons housing adult males in England and informed consent obtained. Inclusion criteria for the study were:

(1) Aged 50 or over;
(2) Newly-arrived into a participating prison with a known release date (convicted) or likely release date (un-convicted) of at least three months after their prison entry date.

Participants were excluded if:

(1) They did not have the capacity to provide informed consent;

(2) They were considered by prison or healthcare staff not safe to interview alone due to their current risk assessment;
(3) They had previously been included in the study.

Procedure

Design

The study was designed to evaluate the OHSCAP. It consisted of a parallel two group RCT with 1:1 individual participant allocation to either the OHSCAP intervention plus TAU (intervention group) or TAU alone (control group). The main trial was conducted alongside (1) an audit of the fidelity and quality of implementation of the OHSCAP; (2) economic evaluation examining the cost-effectiveness of providing the OHSCAP; and (3) a nested qualitative study to explore the views and experiences of participants and professionals involved in the study.

Randomised Controlled Trial

Older Prisoner Leads at each of the participating prisons were recruited and trained to deliver the intervention (OHSCAP).

Sample Size

The sample size was calculated based on our previous work (a cross-sectional study assessing the unmet needs of 100 older prisoners at baseline), where the mean number of unmet needs was 2.71 (sd=2.65). The distribution of unmet need ranged from 0-25 and was positively skewed with 2 being the median number of unmet needs. It was assumed that this distribution would be broadly similar at three months follow-up in the TAU group. It was believed that for this study to be practice-changing at least a 30% reduction to a mean of 1.90 would be required, so the study was powered accordingly, with 196 participants required in each trial arm at three-month follow-up.

Recruitment

An administrator within each of the prisons identified potential participants who fulfilled the inclusion criteria and informed them of the study. If the service user was interested to learn more, the administrator sought their permission to pass their details on the research team. A researcher then met each potential participant to discuss the study further.

Informed consent was sought from all potential participants prior to their taking part.

Randomisation

An individual-level randomised design was implemented. Randomisation was undertaken by the Manchester Academic Health Science Centre Clinical Trials Unit (MAHSC – CTU). Participants were randomised to receive the OHSCAP or TAU. The allocation method was minimisation with a random element using imbalance scores over the margins of two factors: Institution and baseline number of unmet needs (0, 1, 2, 3, 4+).

It was not possible to conduct a double-blinded study. Participants unavoidably became aware of which group they had been allocated to when they received the intervention. Furthermore, the researchers knew which group some of the participants belonged to because some of the intervention group took part in semi-structured interviews.

Fidelity of Implementation

Following the completion of data collection and all OHSCAP assessments in study sites, researchers contacted the OHSCAP lead at each site and requested anonymised photocopies of the OHSCAPs they had produced. Once collated, the anonymised copies were audited by a trained reviewer, who remained independent from the research team. A bespoke audit tool was developed specifically for this purpose. 150 (68%) of OHSCAP assessments were audited.

Qualitative Study

Semi-structured interviews were held with staff delivering the OHSCAP, including prison officers (n=5) and healthcare staff (n=7) to gain an understanding of the processes involved.

It was necessary to ensure an in-depth understanding of the social context and relationships impacting on the successful implementation of the OHSCAP were understood. Additionally, semi-structured interviews were held with 14 prisoner participants who had received the OHSCAP to understand the facilitators and barriers involved in its delivery.

Cost-Effectiveness Evaluation

A within-trial cost-utility analysis (CUA) of the OHSCAP compared with TAU was conducted as part of the trial. The primary outcome measure for the economic evaluation was health-related quality of life (HRQoL) as measured by the EQ-5D-5L-. Participants' responses were converted to a single index utility value based upon preference weights obtained from an English general population sample. These utility values facilitate the calculation of quality-adjusted life years (QALYs) using the area under the curve method, which form the outcome of the economic evaluation. Relevant resource use between baseline and follow-up was collected retrospectively using the Secure Facilities Service Use Schedule (SF-SUS) and review of healthcare files. Costs were calculated by multiplying resource use data by the relevant unit cost figures. All costs were valued in pounds sterling, according to the price year representing the mid-point of the trial (2014/15).

Outcome measures

The primary outcome measure was the mean number of unmet health and social care needs at three months as measured by The Camberwell Assessment of Need–Short Forensic Version (CANFOR-S).

Secondary outcome measures were: (1) functional health and wellbeing and activities of daily living as measured by The Bristol Activities of Daily Living Scale; (2) Depressive symptoms as measured by The Geriatric Depression Scale – Short form; (3) Health-related quality of life (HRQoL) as measured by The EQ-5D-5L; and (4) the extent to which specific health and social care needs had been addressed according to responses using a bespoke OHSCAP tool.

The following tools were also be used at baseline to describe the sample:

1. PriSnQuest – a brief mental health assessment, which indicates whether more in-depth assessment is required.

2. Burvil Grid to obtain data on the physical health of participants.

Statistical Analysis

All analyses were carried out using the intention to treat principle with data from all participants included in the analysis, including those who did not complete the OHSCAP assessments as intended. Analysis was conducted in SPSS version 20.

The primary hypothesis for the change in the mean number of unmet needs as measured by the CANFOR-S was analysed using appropriate regression models, adjusted for baseline characteristics used in the minimisation process e.g. site and number of unmet needs at baseline. Bootstrapping accounted for the skewness in the outcome of the data and 95% confidence intervals were calculated around all key effect size measures. Two- sided p values were reported. In addition, a Poisson model was used to analyse the data as counts. Each relevant domain of the CANFOR was analysed separately using logistic regression, again with adjustment for baseline characteristics. Similar approaches were adopted for the secondary outcomes with the linear regression models used for continuous outcomes, and logistic regression for binary outcomes.

Qualitative data were analysed thematically, applying a framework method. The framework method produced a matrix of summarised data which provided a structure to analyse and reduce the data.

Results

Ten prisons participated. 497 male prisoners meeting the study criteria consented to take part; 248 were randomised to the OHSCAP group, 249 to TAU. Even numbers (202) within each trial arm successfully completed three-month follow-up.

The RCT did not identify any significant differences between the intervention and TAU groups in relation to the primary outcome. There were no tests of statistical significance for differences between randomised groups on any baseline variable, with the exception of “hearing instructions”, (one sub-section of the bespoke OHSCAP research tool).

The audit of completed OHSCAPs assessments and care plans highlighted several problems with completion of the document. Although the assessment sections were often completed well, there were particular problems with the; care planning and review processes; and information sharing. The evidence obtained during the audit process overwhelmingly suggested that the OHSCAP was not implemented as intended. Four super-ordinate themes emerged from the qualitative data, namely: the broken prison system; rigid prison processes, prisoner and staff relationships and the OHSCAP procedure itself. The OHSCAP was delivered within a prison system that was perceived by prisoners and staff to be in crisis. This acted as a fundamental barrier to its successful implementation. Rigid prison processes including a lack of real partnerships between prison and healthcare staff impeded the OHSCAP process. Overall, prison officers were not considered to be ideal facilitators of the OHSCAP.

The within-trial cost-effectiveness analysis found no significant differences in either the costs or QALYs between the treatment as usual and OHSCAP arms of the trial.

Conclusions

The aim of the OHSCAP was to streamline current processes and create a more systematic approach to identifying and managing older prisoner’s health and social care needs. There were no statistically significant differences in total unmet health and social care needs between the group of older prisoners that received the OHSCAP and those that received TAU.

However, the results of the audit illustrate that the OHSCAP was fundamentally not delivered as intended.

The qualitative interviews provided insight into why the OHSCAP was not delivered as intended. Most strikingly, the prison system was considered currently to be 'broken', predominately as a result of a drastic reduction in prison officers. To potentially add value, the OHSCAP is reliant upon previously-established prison processes being fully operational but this appears not to have been the case for the duration of this trial.

Implications for Practice

1. Careful consideration should be made regarding who should facilitate initiatives for older prisoners which involve multi-disciplinary input, such as the OHSCAP. Prisoners did not deem it acceptable for prison officers to deliver the OHSCAP. This needs to be taken into consideration for any further exploratory work with this, or similar, tools. It would be beneficial if facilitators of these types of tools were employed within a designated role with protected time, preventing their routine redeployment to other wing duties. Facilitators should have knowledge, experience and interest in older prisoner issues. OHSCAP facilitators require skills in conducting assessments, case management and setting appropriate review periods. It is necessary to either ensure there are predefined review time periods for the OHSCAP or to ensure staff members feel confident, are skilled and have a manageable workload in order for them to be able to successfully determine when reviews should be conducted and to ensure reviews are completed on time. Further work is required to assist in meaningful partnership working and information sharing between prison and healthcare staff. Initiatives that would assist this process would include joint training, designated 'information sharing and collaboration leads' within each relevant organisation and the development of clear policies to assist staff in understanding what can and cannot be appropriately shared and on what social care is and why it's different to healthcare.

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Implications for future research

1. In light of the problems with implementation of the OHSCAP to review the best ways of identifying and appropriately addressing older prisoners' health and social care needs.
2. The ways in which the Health and Social Care Act and the recently announced prison reforms (1) have been and will continue to be implemented across the English and Welsh prison estate needs to be identified and gaps in services addressed. Furthermore, the implementation of the 2014 Care Act places new responsibilities upon local authority Adult Social Care Departments. The way in which these responsibilities are discharged, particularly case finding, assessment and care coordination need further investigation.
3. A full training needs assessment of the knowledge and skills of prison and healthcare staff concerning older prisoner issues should be completed. This will provide a basis from which skills deficits can be clearly identified; suitable training developed and implemented with the aim of improving individual care and making prisons more informed environments with regard to older people.
4. Because prisons are unique and discrete environments which differ significantly from either home or other institutional settings in which older people are cared for ,focussed ethnography should be conducted to generate an understanding of the way in which the prison environment, prison staff and younger/age matched peers interact with and affect/influence the day to day lives of older prisoners particularly with regard to meeting of their social care needs. .
5. Researchers conducting future randomised controlled trials in prison should carefully consider the balance between protecting the fidelity of initiatives being evaluated and ensuring the research is conducted within a 'real life' setting.
6. When public finances are severely limited, any money spent needs to be spent efficiently. A major contribution to this is the conduct of high quality research which identifies "*what works*". For services to evolve positively and efficiently institutions need to remain to facilitating research as a valuable and valued contributor to high quality, modern service provision. Those with the ability to positively influence the publically or

privately provided institutional care to proactively engage with the research community for the betterment of services in the short and long term.

Study registration

Trial Registry: UK Clinical Research Network Portfolio, ISRCTN ID: 11841493.

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