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REVIEW ARTICLE

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Factors influencing compliance with Hepatitis C treatment in patients transitioning from prison to community—A summary scoping review

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Abstract

It is well-established that prevalence of Hepatitis C (HCV) infection in prisoners is disproportionately higher than in the general population. While developments in screening and treatment for HCV have enabled greater detection and treatment in prison, release is a high-risk time for HCV infected prisoners returning to the challenges of community living. A scoping review was conducted to examine the evidence on individual, provider and system level factors that influence compliance with HCV treatment in patients transitioning from prison to community. Retrieved articles were screened and those eligible were selected for data extraction. Quantitative and qualitative studies were included. Electronic peer-reviewed databases were searched in February 2022: 140 articles were initially identified of which seven were included in the final review. Six key themes characterized the literature: education, case management and discharge planning, hepatology in-reach nurses, transition clinics, primary care providers and system wide approach. This summary scoping review highlights the paucity of research in this area. There is a need for experimental research to investigate specific interventions, and to understand HCV care-specific barriers and facilitators. A multi-pronged approach is needed to address barriers to healthcare services in general but also specific barriers relating to HCV. Factors that facilitate compliance should also be recognized and amplified across regional HCV elimination strategies.

KEYWORDS
compliance, ex-prisoners, Hepatitis C, treatment

1 | INTRODUCTION

It is well-established that prevalence of Hepatitis C (HCV) infection in prisoners is disproportionately higher than in the general population. While developments in screening and treatment for HCV have enabled greater detection and treatment in prison, release is a high-risk time for HCV infected prisoners returning to the challenges of community living.

A scoping review was conducted to examine the evidence on individual, provider and system level factors that influence

Abbreviations: DAAs, direct acting antivirals; HCV, Hepatitis C.

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compliance with HCV treatment in patients transitioning from prison to community.

Electronic peer-reviewed databases were searched: 140 articles were initially identified of which seven were included in the final review. Five key themes were identified, described below and in Table 1:

1.1 | Education

Education was a key theme that appeared in four studies included in this review.[1–5] Authors noted the importance of a multi-layered education provision:

1.1.1 | Patient education

There was an overall lack of patient knowledge of the disease process and associated health implications. Fear of HCV treatment was a common among prisoners, with concerns that it was invasive with an unfavourable side effect profile. On-site provision of disease-specific education by healthcare providers to prison staff and prisoners was identified as an important facilitator to improving compliance with HCV treatment upon release.

1.1.2 | Peer dissemination/navigators

A recurrent theme about the way in which HCV-related knowledge was acquired in prison was communication with other incarcerated individuals. Peer dissemination of HCV knowledge resulted in increased trust and engagement with treatment, in part attributed to shared life experiences and the social exclusion.[4] Peer navigation holds particular promise in facilitating transition to medical and social services on release—highlighting the importance of fostering positive bonds whilst in prison to allow for meaningful engagement and integration into society.

Studies indicated that prisoners who have successfully completed HCV treatment express hope for social reinclusion and a desire to remain drug free. Part of this psychosocial shift included a commitment to engage with peers to educate and support them through treatment.[2]

1.1.3 | Stakeholder education

Stakeholder education was highlighted as a key facilitator to enhanced compliance with HCV treatment. Successful examples of micro-elimination of HCV in prison settings has largely been attributed to the delivery of 'prison- focused' education for prisoners, prison officers and clinicians. Providing education to all relevant stakeholders, particularly community providers, could improve therapeutic relationships. Poor provider attitudes such as disrespect, inadequate communication and negative perceptions of prisoners' sexuality have created stigma and barriers to accessing HCV treatment upon release.[2,5]

1.2 | Case management and discharge planning

The role of comprehensive case management and discharge planning was a recurring theme.[1,2,3,5,6] Development of structured transition plans should incorporate several key elements to provide the greatest chance for linkage to care:

1.2.1 | Discharge planning

A comprehensive multi-disciplinary discharge plan could mitigate competing priorities at the time of release that impact not only an individual's ability to access HCV treatment but also their ability to reorientate themselves back into society in a meaningful way. High prison turnover and unplanned or unforeseen prison transfers make it difficult to effectively plan a comprehensive discharge. Developing inter-establishment protocols for care continuity would allow receiving facilities to quickly identify the medicinal needs of new prisoners and more time to focus on case management.[1]

1.2.2 | Case management

The presence of social support post incarceration has been demonstrated to facilitate linkage to HCV care. Many individuals in contact with the criminal justice system experience fractious interpersonal relationships. Thus, the role of case managers and support from peer navigators should not be overlooked. This can facilitate ongoing HCV care by fostering social supports for an otherwise marginalized individual.

1.2.3 | Transportation

A recent qualitative study indicated that transportation to healthcare facilities was a major barrier to HCV treatment continuation in the community.[7] A lack of transportation on release from prison, untimely prison transfers and difficulties establishing a secure base upon release make it difficult for prisoners to avail of HCV treatment even if they were initially motivated to complete treatment. Community hubs, specialist in-reach services or transitional care facilities have all been suggested as a means of navigating these logistical barriers.

1.3 | Hepatology in-reach nurses

Prisoners and ex-prisoners describe relationships with in-reach nurses as one based on trust, familiarity and support. They are an

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TABLE 1 Overview of factors influencing compliance with Hepatitis C treatment in patients transitioning from prison to community

Reference	Level (individual/provider/system)	Barriers/Facilitators	Context	Methodology	Themes identified
[1]	Individual: Competing priorities Provider: Inadequate access to healthcare information Lack of specialized linkage to care programmes. Prisoner and stakeholder education System: In-reach hepatology services	Barriers: Poor providers attitudes Facilitators: Case management Discharge planning Transportation assistance Housing support Peer navigation Social support prior Existing primary care provider	Using the barriers and facilitators to linkage to HIV care to inform Hepatitis C virus (HCV) linkage to care strategies for people released from prison	Systematic review $N = 29$ All studies carried out in USA	Call for research Discharge planning Hepatology in-reach nurses
[6]	Provider: GPs and community care providers trained in treatment and management of HCV System: Community/primary care-based model of HCV provision	Barriers: Lack of specialist HCV care givers Transportation issues Lack of contextualized health policy	Enhanced use of primary and community care facilities to provide treatment and management for HCV patients	A narrative systematic review of 6 data bases	Transition clinics and primary care providers Discharge planning System wide approach Hepatology in-reach nurses
[5]	Individual: HCV education in prisons Provider: Peer led knowledge dissemination Discharge planning System: Lack of contextualized HCV policies	Barriers: Unstable housing Unemployment Substance abuse Mental illness Facilitators: Social support Having dependants	To understand participants' attitudes, knowledge and acceptability of HCV treatment in jail and following return to the community.	Clinical data reports and semi-structured interviews—thematic analysis	Education Discharge planning System wide approach
[2]	Individual: Lack of knowledge Competing priorities Provider: In-reach hepatology nurses System: Lack of contextualized HCV policies	Facilitators: HCV education In-reach hepatology nurses Barriers: Individual factors Lack of contextual health policy to support transitional care	To understand the prisoner experience of prison and community-based HCV care	One-to-one, in-person and in-depth semi-structured interviews ($n = 25$)	Education System wide approach In-reach hepatology nurses Discharge planning
[3]	Individual: Competing priorities Provider: Lack of transition clinics and primary care providers Training of non-medical providers System: Lack of contextualized HCV policies	Barriers: Lack of research on targeted interventions in this group Lack of contextual health policy to support transitional care	Community nurse-led delivery of health and social care interventions to ex-offenders in the UK	Discussion paper-use of community led nurse interventions	Call for research: System wide approach Transition clinics and primary care providers

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TABLE 1 (Continued)

Reference	Level (individual/provider/system)	Barriers/Facilitators	Context	Methodology	Themes identified
[4]	Individual: Peer navigators Provider: Transitional clinics Training of primary care providers System: Intersectoral Collaboration Decriminalization policies Lack of contextualized HCV policies	Facilitators: Peer navigators Transitional clinics Intersectoral collaboration	Strategies to prevent reinfection of HCV in prisoners in the post release period	Editorial	Transition clinics and primary care providers System wide approach
[8]	System: Enhance collaboration between criminal justice and public health systems. Decriminalization policies	Barriers: Stigma of drug use and accessing associated treatment services Lack of contextual health policy to support transitional care	Challenges associated with the provision of health services within prisons and transition to the community	Review—infectious disease control in prisons and transition to community	System wide approach Education Transition clinics and primary care providers

important factor in a prisoner's transition and are often the only constant presence over many episodes of reincarcerations and reintegration from prison to community.[2]

Developments in pharmacological HCV treatment and the introduction of direct acting antivirals (DAAs) means that reduced clinical supervision is required during the HCV treatment regimen. Reduced nurse–patient contact may reduce the time available to address psychosocial issues that often impacts prisoners' compliance. The therapeutic alliance between patient and nurse may not be as well-established due to less regular contact. Treatment may result in HCV elimination but fail to address other complex issues that may influence a return to drug use or other risk-taking behaviours. Overall, the role of the in-reach nurse was viewed as positive by prisoners, but consideration needs to be given to the role of specialist in-reach nurses both in terms of their provision of medication and more in-depth psychosocial support.

1.4 | Transition clinics and primary care providers

Transitional clinics are defined as 'primary care–complex care management programmes tailored to engage recently released prisoners in care'. Findings suggest that a hybrid model of healthcare provision is most effective in optimizing transition care. The combination of support options may involve linking primary care providers with specialist in-reach nurses, substance abuse or mental health services.[3,4,6] Primary care providers have successfully taken the lead in the management of several chronic diseases such as asthma, chronic obstructive pulmonary disease and diabetes.[6]

Ultimately, many individuals recently released from prison will need a range of support services. Transitional clinics are one potential vehicle from which to deliver this support. The transition clinic model does not necessarily require new infrastructure as clinics are often embedded within pre-existing community health centres with training for primary care providers.

However, it is important to note that primary care providers in the UK are already experiencing significant strain, with declining GP numbers, rising demand and struggles to recruit and retain staff. Any initiative to extend the remit of primary care to provision of transitional care for released prisoners must be part of a system wide discussion about responsibility and shared care arrangements.

1.5 | A system wide approach

For many prisoners, release from prison is as an extremely chaotic period following the relative stability of prison life. Lack of housing, difficulty sourcing stable or meaningful employment, co-existing substance or mental health issues all have implications for an individual's ability to engage with ongoing treatment.

Several studies recognized the need for a multi-pronged, system wide approach to HCV treatment in prisoners transitioning to

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community.[2,4–6] This includes the need for enhanced collaboration between the criminal justice and public health systems. There was widespread recognition that any strategy intended to enhance HCV compliance in prisoners transitioning to community needs to be contextualized to address competing priorities. This means a sustained, collective effort across multiple agencies and departments (e.g. criminal justice department, medical and mental health services, social services and public health departments).

Two studies[4,8] in the review suggested 'decriminalization' policies as a step towards reducing the overall HCV burden in prisons. 'Decriminalization' describes the removal of criminal sanctions against an act or behaviour. Instead of prosecution and potential incarceration, individuals may face sanctions such as fines, revoked licences or diversion to treatment programmes. If successfully implemented, decriminalization policies could potentially help tackle wider prison issues such as overcrowding, unsafe drug injection and high-risk sexual behaviour that facilitates onward transmission of HCV within prisons and to the community on release.

Jail diversion programmes are an alternative to incarceration. Such programmes divert individuals with serious mental illness and substance use disorders from jail to community-based care. The global aim of such an approach is to reduce the number of people incarcerated for nonviolent crimes without increasing public safety risk.

2 | SUMMARY

Infection with HCV in prisoners is often confounded by a myriad of psychosocial issues. Focussing purely on HCV treatment pathways without addressing the social, structural and economic determinants of health will be less effective in reducing the overall burden of HCV. Individual factors such as education, access to stable housing, meaningful employment and social support must be addressed to create the conditions required for HCV compliance during the transitional phase. Provision of services for co-existing mental illness or substance misuse has been shown to positively impact an individual's ability to engage with HCV treatment.

Policy makers, healthcare providers, public health experts and justice departments must work synergistically to develop and evaluate a transitional care system for prisoners. This approach has the potential to improve healthcare access not only for this cohort but for other marginalized and socially excluded populations.

CONFLICT OF INTEREST

None declared.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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