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Addressing Social Determinants of Health in Linkage-to-Care Interventions for Hepatitis C: A systematic review

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1

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ABSTRACT

As of 2017, there were more than three million individuals in the United States infected with Hepatitis C virus (HCV) [1]. Because most cases are asymptomatic, leading to a higher rate of unreported cases, this number is suspected to be much higher. Furthermore, there is a rise of HCV cases, and this increase documented since 2013 is primarily due to injection drug transmission alongside the rise of the opioid epidemic [2]. The Centers for Disease Control and Prevention (CDC) encourages HCV testing for all adults at least once in their lifetime, and those that test positive for HCV should be linked to treatment [3]. In 2013, only 13%-18% of patients with HCV received treatment in that year, indicating that there are barriers to treatment, such as lack of treatment acceptance, co-existing conditions, extensive treatment, side-effects, and access to treatment[4]. Thus, health disparities may ensue and the eradication of HCV as a public health issue becomes even more challenging. Edlin and Winkelstein (2014) suggested that to achieve optimal HCV eradication, social determinants of health, such as homelessness, need to be addressed [5]. Because there is room for improvement in linkage-to-care opportunities, it is important to explore whether linkage-to-care interventions address social determinants of health, and if so, which ones, to obtain a better understanding of what may help improve patient outcomes.

References:

- U.S. Department of Health and Human Services. 2019. Retrieved June 11, 2020, from <https://www.hhs.gov/opa/reproductive-health/fact-sheets/sexually-transmitted-diseases/hepatitis-c/index.html>
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- Edlin, B. & Winkelstein, E. (2014). "Can Hepatitis C be eradicated in the U.S.?" Antiviral Research. 110: 79-93. <https://dx.doi.org/10.1016/j.antiviral.2014.07.015>

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KEYWORDS

Hepatitis C, Linkage-to-Care, Social Determinants of Health, Public Health, Systematic Review

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GUIDELINES

Inclusion Criteria

- A) Peer-reviewed articles
- B) Published between 2010-2020
- C) Limited to the United States
- D) Focus of the article is on linkage-to-care interventions for Hepatitis C patients AND social determinants of health
- E) English language
- F) Full-text articles

Exclusion criteria:

- A) Not peer-reviewed, such as gray literature
- B) Published over 10 years ago
- C) Not in the United States
- D) Focus is not linkage-to-care interventions
- E) Study does not mention any social determinants of health
- F) Not in English
- G) Not full-text
- H) Not specific to Hepatitis C

Aims:

- 1) Identify Hepatitis C Linkage-to-Care interventions that have a social determinants of health factor;
- 2) Identify if intervention was successful based on reported outcomes; and,
- 3) Identify how social determinants of health factor(s) were addressed in the intervention.

ABSTRACT

As of 2017, there were more than three million individuals in the United States infected with Hepatitis C virus (HCV) [1]. Because most cases are asymptomatic, leading to a higher rate of unreported cases, this number is suspected to be much higher. Furthermore, there is a rise of HCV cases, and this increase documented since 2013 is primarily due to injection drug transmission alongside the rise of the opioid epidemic [2]. The Centers for Disease

Control and Prevention (CDC) encourages HCV testing for all adults at least once in their lifetime, and those that test positive for HCV should be linked to treatment [3]. In 2013, only 13%-18% of patients with HCV received treatment in that year, indicating that there are barriers to treatment, such as lack of treatment acceptance, co-existing conditions, extensive treatment, side-effects, and access to treatment[4]. Thus, health disparities may ensue and the eradication of HCV as a public health issue becomes even more challenging. Edlin and Winkelstein (2014) suggested that to achieve optimal HCV eradication, social determinants of health, such as homelessness, need to be addressed [5]. Because there is room for improvement in linkage-to-care opportunities, it is important to explore whether linkage-to-care interventions address social determinants of health, and if so, which ones, to obtain a better understanding of what may help improve patient outcomes.

References:

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Objective

1 What social determinants of health do Hepatitis C Linkage-to-Care interventions address?

Methods

2 This section will include the methods and guidelines by which the systematic review will be conducted.

2.1 Outcomes of Interest

Alongside data on whether or not the intervention was successful in linking Hepatitis C patients to care, data on how social determinants of health were addressed in linkage-to-care interventions will be sought out.

2.2 Inclusion Criteria

- A) Peer-reviewed articles
- B) Published between 2010-2020
- C) Limited to the United States
- D) Focus of the article is on linkage-to-care interventions for Hepatitis C patients AND social determinants of health
- E) English language
- F) Full-text articles

Exclusion criteria

- A) Not peer-reviewed, such as gray literature
- B) Published over 10 years ago
- C) Not in the United States
- D) Focus is not linkage-to-care interventions
- E) Study does not mention any social determinants of health
- F) Not in English
- G) Not full-text
- H) Not specific to Hepatitis C

2.3 Information Sources

Databases to be used:

- A) PubMed
- B) CINAHLComplete
- C) ProQuest

Gray literature will not be used.

Study authors will not be contacted.

2.4 Search Strategy (following the PRISMA Guidelines)

2.3.1. Identifying Articles

A) Search each database listed above to identify articles that are eligible according to the inclusion criteria above.

Apply the following filters:

- publication date
- species
- language
- full-text availability.

B) Conduct searches using the Boolean keyword method (AND/OR). Record use of keywords in an Excel spreadsheet with and without filters.

Such keywords include: (linkage to care OR linkage to cure OR interventions OR social determinants of health OR community health) AND (hepatitis C OR social determinants of health).

2.3.2. Title Screening

A) Conduct a preliminary screening for duplicated articles. Record the number of duplicated articles in an Excel spreadsheet.

B) Screen titles for the inclusion criteria (and by default, relevance to the research question, Hepatitis C and linkage to care interventions). Record the number of those excluded and included.

2.3.3. Abstract Screening

A) Screen abstracts of remaining articles for relevance to the inclusion criteria (and by default, relevance to the research question, Hepatitis C and linkage to care interventions). Record the number of those excluded and included.

2.3.4. Article Screening

A) Screen remaining full articles according to the inclusion and exclusion criteria. Record the number of those excluded and included, and the reason as to why those excluded were so.

2.3.5. PRISMA

A) Fill in PRISMA diagram.

3 Analysis

This section includes the analysis plan for the systematic review.

3.1

Data from the reviewed publications will be extracted individually by the researchers and compared.

Findings from the studies will be compiled in a categorical matrix.

Data extracted will include: state where study occurred; linkage-to-care definition/element; linkage-to-care setting (i.e. clinic, prison, jail); sample size; study intervention; social determinants of health; and outcomes.

Authors will describe the extracted data.