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Hepatitis C Management for Individuals in Custody

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Executive Summary

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NURS 697 DNP Project

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Hepatitis C Management for Individuals in Custody

According to the Centers for Disease Control and Prevention (CDC), the hepatitis C virus (HCV) is the pathogen that causes hepatitis C, a liver infection. HCV is transmitted by contact with infected people's blood. This disease is a silent killer because symptoms rarely occur during early infection. Many infected people may not show signs until the condition has damaged their liver, and the few who show symptoms like fatigue, malaise, abdominal pain, nausea, and flu-like symptoms may not even know it is caused by hepatitis. It is the most common chronic liver disease linked to hepatocellular carcinoma, accounting for about half of all cases, and the most common reason for liver transplantation in the United States (Centers for Disease Control and Prevention, 2020).

Literature review

Beginning in 2012, more individuals died of HCV-related infections than 60 other nationally reportable infectious diseases, such as human immunodeficiency virus (HIV), hepatitis B, or tuberculosis. Nevertheless, hepatitis C has not generated a sense of urgency or diversion of funds associated with other infectious disease epidemics. This may be due to its slow course, the low prevalence in the general population, the high cost of treatment, or the spread outside the public's view, primarily among groups that reside in the social shadows of poverty and drug use. (Spaulding et al., 2018). Injecting risk exposures is one of the routes by which HCV is transmitted among the incarcerated population. However, there are also several non-injecting risk behaviors which include physical violence during bloody fist fights in which blood-to-blood contact occurs, tattooing, and the reuse of barber shears. Activities such as exposure to bleeding

caused by intimate partner violence, sexual transmission among males via anal sex, and, even in rare cases, vaginal intercourse have also been linked to HCV transmission (Sazzad et al., 2020).

It is disturbing that the frequency of HCV in prisons is as high as estimated, given its long-term and far-reaching negative consequences on health and well-being (Jack, 2021). HCV testing witnessed significant progress in 2014 with the opt-out bloodborne virus (BBV) testing policy, which requires prison healthcare teams to offer BBV tests to residents upon registration on an opt-out basis, meaning that testing will be done unless the resident refuses. In that same year, the World Health Organization (2014) published the first set of recommendations for the screening and care of individuals with HCV. It advocated for HCV serology testing to be offered to individuals in a population with high HCV prevalence or individuals with a history of HCV risk exposure/behavior, including correctional populations (Morris et al., 2017). The Federal Bureau of Prisons (BOP) issued screening recommendations for HCV in federal prisons in the United States. Starting in April 2016, the BOP advised HCV testing for all sentenced inmates during the preventive baseline visit who declare involvement in a high-risk group, have specified clinical conditions, and request testing (U.S. Federal Bureau of Prisons, 2016). While these guidelines may emphasize the significance of allocating resources to specific groups, they fall short of enforcing the essential screening procedures to improve the health and safety of prison and general populations. In response, the World Health Organization launched a global effort in 2016 to eliminate HCV infection as a severe public health issue by 2030 (World Health Organization, 2016). To target HCV infection, the Federal Bureau of Prisons recommends an opt-out strategy of testing, initiating, and completing direct-acting antiviral (DAA) HCV treatment while in custody. According to Bhattacharya et al. (2023), DAA treatment for chronic HCV infection is feasible within prison settings and would aid the HCV elimination effort. HCV

treatment in correctional settings is cost-effective because DAAs halt the progression of HCV-related liver disease and decrease the risk of cirrhosis, hepatic decompensation, and hepatocellular carcinoma, offsetting future healthcare costs from liver and non-liver complications.

Project Methods

The project aimed to create an educational toolkit for the Department of Correction. These toolkits were meant to target both the Illinois Department of Correction, IDOC staff, and individuals in custody refusing HCV treatment. The goals were to review current evidence-based literature on HCV infection and treatment among the incarcerated population, existing screening methodologies, and screening rates, develop an educational bundle tailored to IDOC, and present the tool to the SIU OCM external stakeholders. The designed education materials served as tools for the IDOC to equip staff and individuals in custody with knowledge about HCV treatment and the consequences of refusing treatment options. The education tools were an infographic flyer designed in both English and Spanish language to teach individuals in custody about Hepatitis C treatment and a PowerPoint presentation designed to equip staff working with incarcerated populations on how to deal with HCV treatment refusals among this population. Nurses working in the prison were trained to admit this educational tool to all new and old inmates. These educational materials were designed in English and Spanish for easy understanding.

Evaluation

A post-survey was created using the Qualtrics platform and distributed to IDOC nurses using an online link after they had used the HCV toolkit. The post-survey was to gather information on how the education materials improved nurses' knowledge of handling hepatitis C virus (HCV) treatment refusals. The total of nurses that participated in the intervention was 15,

and 100% of them completed the post-survey (n=15). Statistical analysis shows the mode years of experience of the participants was 10, indicating that the nursing staff has a good deal of experience. 86.6% of the participants (n=13) strongly agreed that the presentation provided a clear understanding of risks associated with incarceration and HCV, including the impact of untreated Hepatitis C, and 80% (n=12) reported that the presentation provided a clear understanding of factors that enhance treatment adherence and ways to handle treatment refusal among individuals in custody. Among the respondents, 93.3% (n=14) agreed that the information presented was relevant to their role as healthcare providers working with individuals in custody. To assess the effect of the presentation based on the knowledge received, participants were asked to score their confidence level; 73.3% (n=11) of the participants felt confident in their knowledge of strategies to address HCV treatment refusals among individuals in custody. Some of the possible practice changes that were mentioned on the survey included “to be more vigilant to follow-up of signs and symptoms of treatment side effects, and ability to understand laboratory values that need prompt follow up.” Another participant reported that the presentation would help them improve the education about HCV treatment offered to the individuals in custody.

The implementation of interventions was limited due to time constraints, and unfortunately, the survey did not include questions directly related to the educational handout which was one of the key items in the toolkit. Only 46.6% (n=7) of participants reported they would be making changes to their current practices as a result of the presentation. This may be due to insufficient time to engage with the material or barriers to making changes. Numerous barriers were expressed in the survey including the need for follow-up on lab work, insufficient sentence length to complete the full length of treatment, backlog in treatment, and the identification of lab testing upon entry/admission to correctional facilities.

Impact on Practice

The immediate impact of the project was a heightened awareness of several individuals in custody refusing HCV treatment. The anticipated long-term impact of this project is that it will achieve increased HCV treatment rates among inmates and improve knowledge among nurses on how to handle HCV treatment refusals. It is essential to administer the infographic flyer on HCV treatment at the same time as when the screening process is being discussed with the new inmates, especially during the admission process to correctional facilities, to reduce HCV treatment refusals in this population. Education can help inmates understand how HCV is transmitted and ways to prevent its spread within correctional facilities. Nurses can play a crucial role in teaching inmates about safe practices, such as not sharing needles or personal hygiene items. In-depth education can enhance understanding of the treatment process, potential side effects, and the importance of adherence to prescribed medications. Finally, nursing practice can improve public health outcomes beyond the correctional facility, as individuals who receive education and treatment while incarcerated are less likely to spread the infection in the community upon release.

Conclusion

Through stakeholder interviews, an ongoing issue with inmates refusing treatment was identified. The literature review and data findings demonstrate that the prevalence of HCV in prisons is alarmingly high, considering its chronic and wide-ranging detrimental effects on individuals' health and well-being. We identified the need to educate staff working with inmates on how to handle treatment refusals and educate the individuals in custody about hepatitis C treatment. By utilizing the newly developed educational instrument, correctional facility staff can anticipate an increase in treatment rates for infected inmates and an improvement in how inmates

are educated regarding the disease process. These interventions will enhance treatment and reduce morbidity and mortality in this vulnerable patient population.