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SHORT COMMUNICATION

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Using Influenza as a Predictor of COVID-19 Vaccination Receipt among Lower Income Adults in the United States

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ABSTRACT

Objectives: With the dispersal of a vaccine to aid in mitigating SARS-CoV-2 (COVID-19) transmission, historical vaccination coverage rates can aid in intervention strategies for the COVID-19 pandemic. This short communication examined the relationship between income and receiving influenza vaccination among U.S. adults.

Methods: This short communication examined existing research regarding the effect that income has on influenza and COVID-19 vaccination receipt throughout the nation.

Results: The Centers for Disease Control and Prevention (CDC) recommends that all individuals (>6 months) receive the influenza (flu) vaccination each year. Yet, flu coverage rates in the US are only 45.3% among adults ≥ 18 years. Similarly, less than two thirds of Americans have received their COVID-19 vaccinations.

Conclusion: In order to increase COVID-19 vaccination receipt, additional research should further examine the relationship between COVID-19 vaccination and income among adults living in the United States.

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KEYWORDS
Income; Influenza; Vaccines; Health Disparities; COVID-19

Introduction

Governments and drug companies around the world worked for many months to produce a safe, reliable, and effective coronavirus disease 2019 (COVID-19) vaccines [1,2,3]. On December 11th, 2020, the Food and Drug Administration (FDA) issued emergency use authorization for the first COVID-19 vaccine in the United States (U.S.) [1,2,3]. While there were initial hopes among the general population that this would signal the end of the pandemic, many in the scientific community warned that life would not go back to normal immediately after the initial COVID-19 vaccinations were approved for use [4-6]. Developing a safe, effective vaccine is only part of the challenge of stopping the spread of COVID-19 [4-6]. Achieving herd immunity and stopping the spread of COVID-19 too depends on the accessibility of the vaccine and its acceptance among different communities [4-6]. Individuals with high-income levels are better positioned to follow the vaccination recommendations set forth by the CDC and prevent subsequent diseases from occurring [7]. The Centers for Disease Control and Prevention (CDC) recommends that all people aged 6 months and older receive influenza (flu) vaccination each year. Yet, flu coverage rates in the US are only 45.3% among adults ≥ 18 years. 8 Despite being readily available and extremely cost-effective, barriers to flu vaccination coverage still exist.8-10 Similar barriers to COVID-19 vaccination coverage have also been observed [3,11,12,13]. As of 24 January 2022, approximately 63.4% of Americans (approximately 210.5 million) have received one shot of J&J vaccine or two doses of Pfizer or Moderna vaccine.3 The main implications of these findings are that inequalities in income levels are limiting the receipt of the COVID-19 vaccines throughout the nation.[3,11,12,13].

Further analysis and research regarding the relationship between total family income and the receipt of flu vaccination may assist in understanding the barriers to COVID-19 vaccination throughout the United States. Similar to flu vaccinations, bi-annual COVID-19 vaccinations might be needed to combat the potential disease variants that may arise in the future [14,15]. COVID-19 vaccination rates will likely be higher for

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those with higher income levels.3 The federal government indicated that COVID-19 vaccines would be available to everyone in America, regardless of their income and health insurance coverage status [16,17]. Still, many bioethicists and infectious-disease specialists were rightfully concerned that the initial doses of the COVID-19 vaccine would still end up being given to the wealthiest Americans first [18,19]. The unequal distribution of COVID-19 vaccines, combined with the vaccine hesitancy seen throughout many communities, will likely further prolong the receipt of the COVID-19 vaccination among those with the lowest income levels [3-26].

Conclusion

The findings from the existing research suggest that public health professionals should further target low-income individuals in future vaccination coverage efforts. In order to help ensure that COVID-19 vaccines are received fairly throughout the nation, government officials at the federal, state, and local levels will need to update their immunization policies, recommendations, and practices. Furthermore, government officials need to continue to work with key stakeholders throughout the nation to ensure that the COVID-19 vaccine doses are properly allocated and distributed to low-income individuals. Such actions could help reduce disparities not only with the receipt of the COVID-19 vaccine, but also influenza vaccination efforts. Despite the cost-effectiveness of influenza and COVID-19 vaccinations, coverage remains low throughout the United States. Income has previously been shown to be a determinant in ensuring widespread flu vaccination coverage throughout the nation. Similarly, income related factors have proven to be an important burden to current COVID-19 vaccination efforts. Now that COVID-19 vaccines have been authorized for use by the federal government, additional studies are needed to further examine the relationship between COVID-19 vaccination and income among adults living in the United States. The results of such research could help identify future intervention strategies to increase the receipt of influenza vaccinations throughout the nation.

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Competiting Interest

None

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