Demographic Characteristics and Opioid Use at the North Carolina Harm Reduction Coalition Needle Exchange

Background

The North Carolina Harm Reduction Coalition (NCHRC) in Wilmington, North Carolina is a non-profit service where transformation of drug policy, harm reduction strategies, and justice reform are implemented. Literature based research suggests that gender\(^1\), affluence\(^2\), and race\(^3\) play significant roles in who utilizes syringe exchange programs. To test this, a survey was distributed to the NCHRC from February 9\(^{th}\) to March 16\(^{th}\) to gather demographic characteristics including age, gender, race, marital status, number of children, employment status, and household income to compare with the number of respondents that identified as current opioid users.

Methods

The driving research question for this study was: What demographic characteristics determine opioid use at the North Carolina Harm Reduction Coalition Needle Exchange? The independent variable in this study consisted of the demographic characteristics of the individuals participating in the study, the dependent variable was their use of opioids. The variables measured were age, gender, race, marital status, number of children, employment status, household income, and opioid use. The questions and coded attributes to each variable in the survey were as follows:

- **What is your age?**
  
  20-25, 26-30, 31-35, 36-40

- **What is your gender?**
  
  Male, Female

- **What is your race?**
  
  White, Hispanic or Latino

- **What is your marital status?**
Single, Married, Divorced or Separated

- **Do you have children?**
  
  Yes, No

- **What is your employment status?**
  
  Employed, Unemployed

- **What is your total household income?**
  
  Less than $20,000, $20,000 to $49,999, $50,000 to $99,999

- **Are you a current opioid user?**
  
  Yes, No

This survey was made a convenience sample because the data was gathered from a predetermined population, those who went to the North Carolina Harm Reduction Coalition. Frequency tables, bivariate statistics, and Pearson's chi square were used to measure the distributions of each variable and determine significance to whether or not the participant was an opioid user.

**Results**

![AGE Chart]

P<.05 was used in determining the significance of a variable. The p-value for age was .037 which showed that age was a statistically significant factor in determining whether or not a participant identified as an opioid user. The median and most frequently reported age range of the respondents was between
31 and 35 (45%). The second largest age range for respondents was between 26 and 30 (25%).
Respondents aged 36 to 40 made up 20% of the survey participants and respondents aged 20 to 25 made up 10%. The p-value for gender was .276, meaning that gender was not significant in predicting opioid use. Females made up 55% of individuals, 80% of which were opioid users. Males made up 45% of respondents, 66.7% of which were opioid users. The p-value for race was .816, meaning race was not significant in predicting opioid use. Of the 94.7% of respondents who identified as White 70.6% were opioid users. Of the 5.3% of respondents who identified as Hispanic or Latino, 100% of them were opioid users. The p-value for marital status was .08 meaning marital status was not significant in predicting opioid use. Of the participants, 70% of respondents were single, 84% of them identifying as opioid users. The study included 20% of married individuals and 10% divorced or separated, half of which identified as opioid users. Half of all participants had children and half did not. Of those who had children 88.9% identified as opioid users and of those who did not have children 55.6% were opioid users. Employment status had a p-value of .225, meaning employment status is not a significant factor in determining opioid use. Half of all respondents were employed, 66.7% of them identifying as opioid users. The remaining 44.4% of respondents were unemployed, 71% of them identifying as users. Household income had a p-value of .228 which means it was not significant in determining opioid use. Of the participants 50% of them earned less than $20,000 annually, 77.8% of which were opioid users. Those who earned $20,000 to $49,999 made up 35% of the respondents and 71.4% of them opioid users. Finally, 15% of respondents earned $50,000 to $99,999 and 66.7% of them identified as opioid users.

Discussion/Implications

A survey of 20 participants from the North Carolina Harm Reduction Coalition showed that age (those 31 to 35) played a significant role in predicting if a person was an opioid user. Other notable findings from the data suggest that the majority of participants identified as female, white, single, employed, had children, and earned less than $20,000 annually. This data varied from some of the results in the literature used to reference demographic characteristics of syringe exchange programs; Allen’s study from 1996 to 2006 in Washington D.C of 3638 participants showed a majority (74.7%) of syringe exchange users were male. Our data differed from this, as the slight majority of NCHRC Needle Exchange participants were female (55%). Strathdee’s study of 1,496 participants’ affluence in New Haven, Connecticut showed that
acquisition of services was made primarily accessible to those with wealth, increasing the likelihood of case management intervention and treatment. His sample showed that 56% of those treated by syringe exchange programs were insured by welfare. Similarly, our study found that 50% of participants had a household income of less than $20,000 annually. Finally, when comparing race, Watter’s study of syringe exchange program demographics in San Francisco, California suggested that Whites and African Americans were the top two racial categories out of 5,639 participants entering syringe exchange programs. This study found that a vast majority of participants from the Needle Exchange were White.

The small sample size and predetermined location from which the study obtained data are limitations that make the results ungeneralizable. The amount of time to collect data for this study was less than two months, a longer period to collect data could have produced a larger sample size. Finally, missing cases from those who did not answer survey questions contributed to an incomplete amount of statistics from each variable.

References


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