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An Evaluation of the Impact of Cost free Healthcare Service among the Minority Population

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Abstract

The purpose of this study is to evaluate the impact of free health care among minority populations using quantitative analysis of existing data. The sample comprised data from 24 online studies and 12 hospital records recorded between 2012 and 2016. The percentage of minority populations with access to free health care was significantly low compared with the majority Whites ($p = 0.029$). I also observed a significant increase in the number of Latinos (23.4%, $p = 0.392$) and Black Americans (25.1%, $p = 0.041$). A significant reduction in chronic conditions was found among Latinos (12.7%, $p = 0.041$) and Black Americans (12.7%). The study also showed a decline in medical debt among Latinos (9.9%, $p = 0.015$) and Black Americans (12.9%, $p = 0.002$). The study provides evidence that free health care has a positive impact on Latinos and Black Americans in the United States.

Keywords: Free health care; medical debt; preventive care; minority groups; access to health care; health status.

1 Introduction

The United States is faced with a disproportionate distribution of wealth, with more poverty among minority groups than among the majority Whites [1].The high unemployment rates, [2] high cost of living, and racially based wage gaps [3] have resulted in the inability of minority groups such as Blacks and Latinos to acquire basic health care services [4] The racial disparity that exists in the provision of health care insurance also impedes minority groups' access to health care services [5]. The resulting deaths from curable but untreated illnesses among

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minority groups prompted the U.S. government to enact policies to give these groups access to health care services [6].

The Medicaid policy and the recently instituted Affordable Care Act (ACA) provide legal frameworks through which low-income earners can access low-cost or free health care [7]. These programs are regarded as a step toward ensuring that all Americans, regardless of their financial status, are able to access affordable care [7]. Davies and his colleagues [8] projected that the government's financial support of the health care institutions that serve low-income earners and poor minority groups will increase their access to quality health care services.

There is an ongoing debate among the policy makers and the public on the importance of free health care and its role in increasing health care access. Critics of the government's support programs such as the ACA and Medicaid regard them as financially unsustainable and claim their impact does not outweigh their cost [9]. The government has also been criticized for a lack of proper planning in implementing the ACA specifically [10]. Some critics of the policy indicate that free health care has come with a decline in quality [11]. However, proponents of the ACA suggest that the approach is the key in providing health care to financially challenged minority groups.

The measure of the importance of free health care is its impact, and thus, evaluating the ACA's role in enhancing health is important. Based on this background, I assessed in this study the impact of free health care among minority populations, focusing on participation in preventive health care, health status, and medical debt.

2 Research Design

I accomplished the goals of this study through quantitative analysis of existing data that I obtained from online databases and hospital records. I based the inclusion criteria for the different online databases on how the primary data had been collected; specifically, I only considered those databases that contained data collected through statistical methods with high generalizability and precision. I also considered government-managed databases and databases managed by reputable organizations to be online data sources. And I rejected databases with low online review ratings. Based on the above criteria, I considered four databases from an original 12: the Centers for Disease Control and Prevention, the Health Management Database, the U.S. National Library of Medicine, and the Centers for Medicare and Medicaid Services. I also examined recorded data from public hospitals that were willing to share their data, including patient records. I excluded from the study hospitals located in areas with low populations of Latinos

and/or Black Americans, leaving a total sample of 24 online studies and 12 hospital records as indicated in Appendix III.

3 Data Collection

The hospital records included data on the reported health cases and on the medical debt among the free health care beneficiaries. I also collected data on the number of beneficiaries who used preventive care services. I retrieved the hospital record data purposively by the use of study's research questions. I collected the data from the online databases based on a search using a set of keywords: the cost of free health care, access to health, Latinos, Black American, and quality; I used the keywords in varying combinations to obtain the study data, which were collected between 2012 and 2016.

3.1 Data Analysis

I first sorted and coded the data obtained from both the online databases and the hospital records to facilitate further analysis. I coded the data by assigning numeric values to the sorted data. I then categorized the coded data into different groups and assessed them for any missing values and outliers, and I corrected the outliers through natural log transformation, and then tested the data for normality using the Kolmogorov–Smirnov test. I analyzed the data on the reported health cases among the program beneficiaries using descriptive statistics by calculating the means, frequencies, and percentages. I analyzed the data on how the free health care provision has affected medical debt and access to preventive care using ANOVA at the 5% level of significance. I used Statistical Package for the Social Sciences {SPSS} version 23 software to conduct the data analysis.

4 Results

Demographics

I analyzed data from a total of 12 hospital records between 2012 and 2016**.** Among the analyzed patients, 26.9% were Latino, 31.2% were Black American, 25.8% were Asian, and 16.1% were White.

Access to free health care among minorities. In this study, I evaluated the access to free health care services by Black Americans and Latinos by determining the average number of individuals enrolled in free health care from 2012 to 2016; Black Americans and Latinos comprised, respectively, 20.6% and 14.7% of the individuals enrolled in the programs, as observed in Figure 1. The proportions of Black Americans and Latinos were significantly lower than the proportion of Whites ($p = 0.029$).

Impact of free health care. I evaluated the impact of providing free health care based on the number of Black Americans and Latinos who were enrolled in the ACA and actively receiving preventive health services such as mammography, weight management, and cholesterol checks. The findings showed an increase in the number of Black and Latino Americans when compared with white population who received free health care. I observed a significant increase in the number of Black Americans who were actively benefiting from preventive care between 2011 and 2012 (12.2%) and between 2015 and 2016 (25.1%, $p = 0.041$). I also observed that the number of Latino Americans who were receiving preventive care increased significantly from 14.3% to 23.4% between 2011 and 2012 and 2015 and 2016 ($p = 0.392$), as indicated in Figure 2.

My assessment of health status among the Black American and Latino families who were receiving free health care through programs such as Medicaid indicated a positive shift in health status. The percentage of Latino patients with chronic conditions decreased between 2010 and 2011 and between 2015 and 2016, with significantly fewer reports of chronic conditions in the periods 2013–2014 (17.5%, $p = 0.209$) and 2015–2016 (12.7%, $p = 0.041$). I observed a similar trend for the reported cases of poor health, with the periods 2013–2014 and 2015–2016 showing significant decreases in the proportions of Latino patients with poor health ($p = 0.022$). The Black Americans who were receiving free health care showed similar changes in health status, with a significant increase in individuals with fair health status in the period 2015–2016 (41.3%) compared with 2010–2011 (21.9%, $p = 0.019$). The number of Black American patients with chronic conditions also decreased to 12.7% in 2015–2016 from the initial 23.3% in the period 2010–2011, as indicated in Table 1.

I also evaluated the impact of the free health care provision based on the state medical debt among Latino and Black American patients between the periods 2010–2011 and 2015–2016, and the findings showed a decline in medical debt among the beneficiaries of free health care. The number of Black American patients with medical debt decreased significantly from an initial 24.3% in 2010–2011 to 12.9% in 2015–2016 ($p = 0.002$), and I observed a similar trend among the Latino patients, with a significantly low percentage being recorded in 2015–2016 (9.9%, $p = 0.015$) compared with in 2010–2011 (19.2%), as indicated in Figure 3.

5 Discussion

In this study, I aimed to establish the impact of free health care among minority populations. I focused on the access to free health care among Latino and Black American health care recipients and its impact on the health status of these minority populations by considering their health status, medical debt, and participation in preventive health care. The study findings showed that Latino and

Black American patients had access to free health care but that the percentage of these minority populations who had access to these services was significantly low (p = 0.029) when compared with that among the majority White patients. The racial disparity in the percentage of individuals with access to free health care could be because few individuals from the minority groups were eligible to receive the free health care compared with the number of eligible Whites [12]. The high number of eligible Whites is attributed to their high population in the country rather than the percentage of poor individuals among them. Therefore, even though the percentage of poor individuals among minority populations is high, the absolute numbers are low compared with the number among the majority White population.

Despite the low access to free health care, I found that the ACA has resulted in positive impacts on minority populations, including the increased number of individuals from Latino and Black American backgrounds who benefit from preventive health services. The study indicated a steady increase from 2010 to 2016, and preventive care is important in limiting the occurrence of preventable conditions such as obesity and other lifestyle diseases.

Free health care was also shown to affect the health status of minority populations; the findings indicated a decrease in the number of Latino and Black American patients with chronic conditions and poor health. The study also showed that the free health care had led to better health among more minority group members. The decreases in chronic conditions and poor health are related to access to and participation in preventive health care services. A number of chronic conditions such as cancer and diabetes have been shown to decrease with increased preventive care [12]. The preventive health services provided through the free health care programs such as Medicaid are important in boosting individual and community health; some of the services include mammography and cholesterol checks, which are important in controlling breast cancer, diabetes, and cardiovascular diseases.[14]

The study also showed a decline in medical debt among the Latino and Black American patients who were enrolled in free health care programs such as Medicaid, and the decrease in medical debt has an important influence in the lives of poor individuals among minority groups. Reduced medical bills enable minorities to not only access health care but also use their limited resources to finance other aspects of their lives, and the decrease in medical debt is directly associated with the financial assistance that comes from the programs. The decline in chronic conditions and poor health due to the provision of preventive health care is also attributed to the decrease in medical debt among free health care beneficiaries.

This study has thus shown that free health care programs are important to minority groups such as Latinos and Black Americans. The programs enable them

to access the health services that lead to improved health and contribute to preventing life-threatening chronic conditions such as cancer. In this study, the reduced occurrence of chronic diseases and improved health led to reductions in medical debt, owing to fewer hospital admissions. It should, however, be noted that the health status and access to preventive care among the beneficiaries of free health care programs that I observed in this study should not be compared with individuals who are under private insurance coverage because there is a great disparity between the two groups [13]. The free health care programs target the citizens with poor financial backgrounds who are at the highest risk for unmet health care needs [8].

The generalizability of this study's findings was influenced by multiple challenges associated with the study design, one of which was the possibility of using sampling that was associated with secondary data. Thus, these outcomes cannot be generalized to the greater population. However, I took steps to minimize this challenge by ensuring that the secondary data sources took into consideration the sampling and data collection techniques. I considered sources with data that had been collected using appropriate sampling. I also used research questions as a guide to prevent the occurrence of bias in the selection of the sources and retrieval of the data.

6 Conclusion

It is evident from the study that free health care services have a major impact among minority populations. According to the study, the free health care provides poor minority group members with access to preventive health care services. The study also indicated that the access to free health care led to fewer chronic health conditions and enhanced health among the minority group members. I also found that individuals' medical debts decreased as they participated in these programs. Based on the findings from this study, it is evident that free health care policies have the ability to enhance the quality of life of minority populations through improved health.

The findings of this study have implications for implementing free health care programs. As noted in the study, fewer than the white population from minority groups have access to free health care; it is important that the eligibility criteria for minority group members be adjusted to accommodate more individuals to ensure racial parity. The U.S. government should also examine the possibility of extending services beyond preventive care.

Although the study showed that free health care programs in the United States have a positive impact on the well-being of minority group members, I did not address the programs' financial sustainability amid increasing poor populations. Future studies should, therefore, examine the long-term

sustainability of these programs and the possible financial demands associated with adjusting the criteria to accommodate more members of minority groups. It is also important to examine the preparedness of health care institutions to provide free health care to minority populations.

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Appendices

Appendix I: Tables

Table 1: The health status of the Black American and Latino individuals enrolled on cost free health services

	Fair health		Poor health		Chronic conditions	
	Blacks	Latinos	Blacks	Latinos	Blacks	Latinos
2010 - 2011	21.9c ±2.853	19.8c ±2.164	54.8a ±1.157	56.5a ±1.663	23.3a ±1.051	23.7a ±2.007
2012 - 2013	22.1c ±1.974	21.1c ±1.901	52.9a ±2.54	55.8a ±1.523	25a ±2.009	23.1a ±1.334
2013 - 2014	29.2b ±2.001	34.2b ±2.007	53.3a 4.002	45.9b ±2.018	17.5b ±1.592	19.9a ±2.111
2015 - 2016	41.3a ±3.532	45.9a ±2.175	46b ±1.035	44.4b ±2.121	12.7c ±1.119	9.7b ±2.871

(Note: The letters a, b c show significant values at **p**=0.05. The values within columns with different letters are significantly different while those sharing letters are not).

Appendix II: Figures

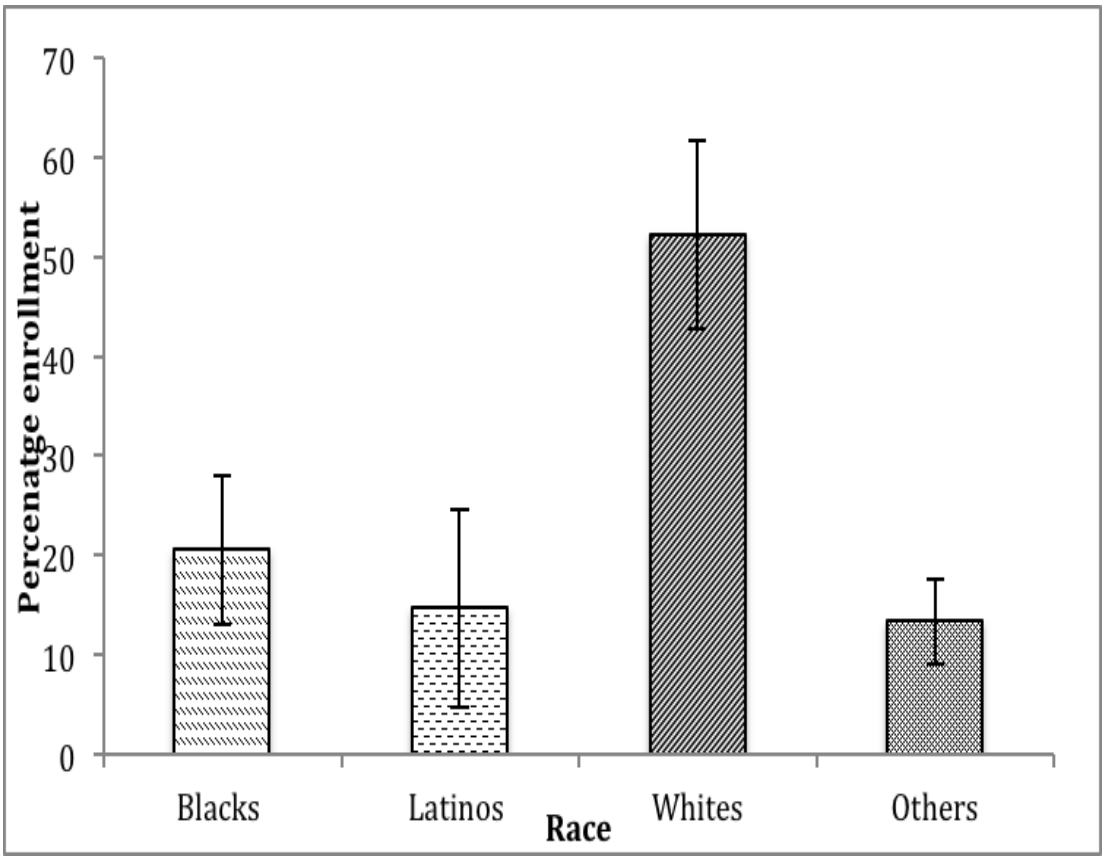

Figure 1: Average cost free health services enrollment between 2011 and 2015

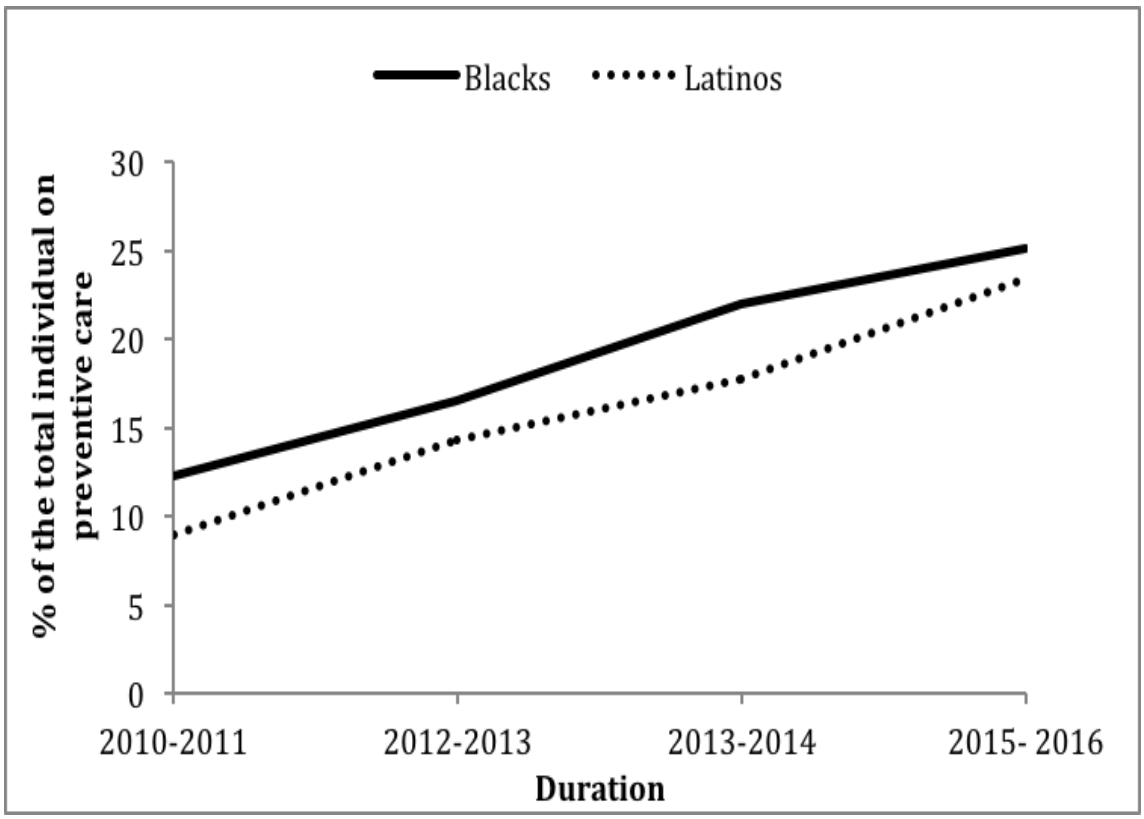

Figure 2: The number of Latino and Black Americans cost free health services beneficiaries on preventive care

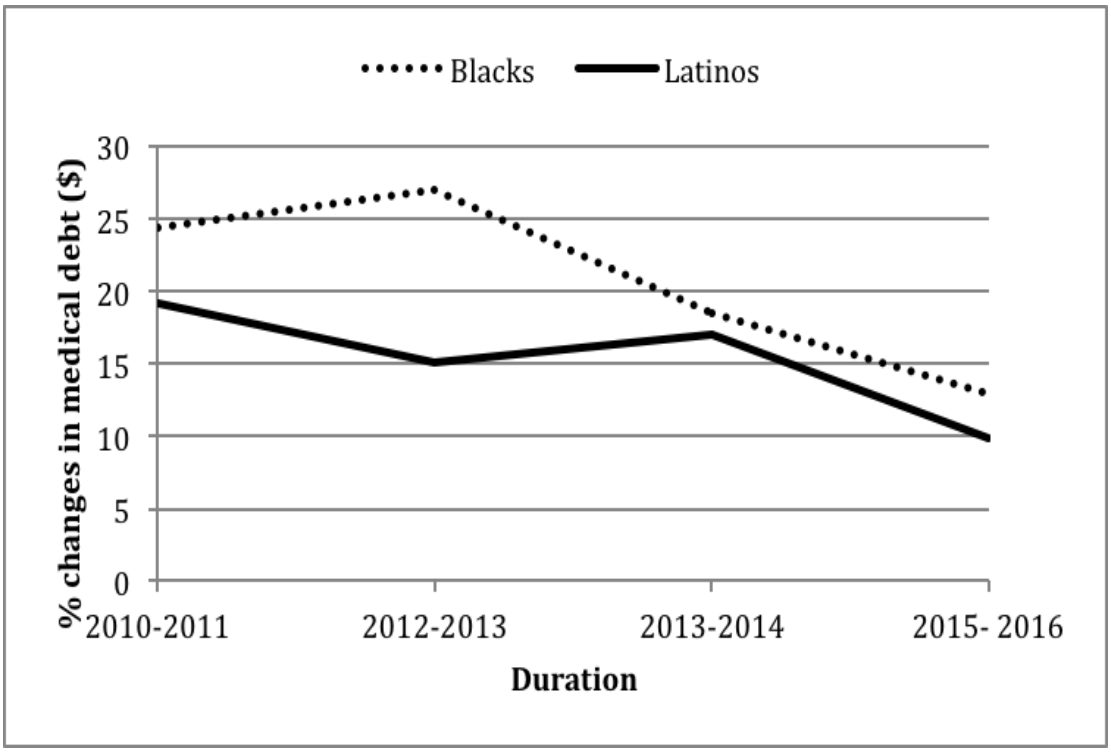

Figure 3: The average change in the medical debt among Latino and Black American enrolled in cost free health services

Appendix III: The description of the selected databases

Table 2: Summary of the electronic databases and the number of selected articles

Database	Database Description	Number of articles
Centers for Disease Control and Prevention	Contain health data and statistics. The database also contains the policy and law in health	5
Health Management Database	The database contains 800 journals and various data that is of importance to researchers in the field of health management. The databases also contain statistics on public health administration.	6
U.S. National Library of Medicine	The database provides links to sites that contain primary data on healthcare management. The database also provides information on drug spending and also gives data on the factors that lead to high cost of care.	8
Centers for Medicare and Medicaid Services	The database is managed by the US government and contains data on expenditure in the health care sector.	5