



# VCU

Virginia Commonwealth University  
VCU Scholars Compass

---

Graduate Medical Education (GME) Resident  
and Fellow Research Day Posters

VCU Health

---

2020

## The influence of health disparities on risk factors in patients with Colorectal cancer

Neha Hippalgaonkar MD  
*VCU Health*

Khalid Matin MD  
*VCU Health*

Follow this and additional works at: [https://scholarscompass.vcu.edu/gme\\_posters](https://scholarscompass.vcu.edu/gme_posters)



Part of the [Medicine and Health Sciences Commons](#)

© The Author

---

Downloaded from

[https://scholarscompass.vcu.edu/gme\\_posters/9](https://scholarscompass.vcu.edu/gme_posters/9)

This Clinical Science Research is brought to you for free and open access by the VCU Health at VCU Scholars Compass. It has been accepted for inclusion in Graduate Medical Education (GME) Resident and Fellow Research Day Posters by an authorized administrator of VCU Scholars Compass. For more information, please contact [libcompass@vcu.edu](mailto:libcompass@vcu.edu).

# The influence of health disparities on risk factors in patients with Colorectal cancer

Neha R. Hippalgaonkar MD<sup>1</sup>, Khalid Matin MD<sup>1</sup>  
<sup>1</sup>Virginia Commonwealth University, Richmond, Virginia

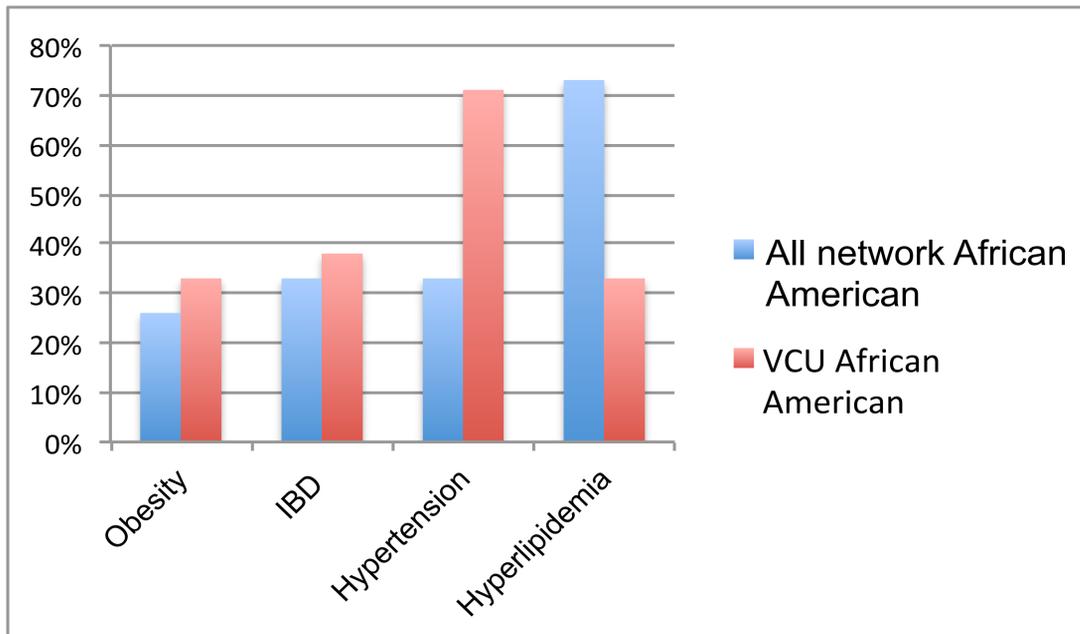


## Background

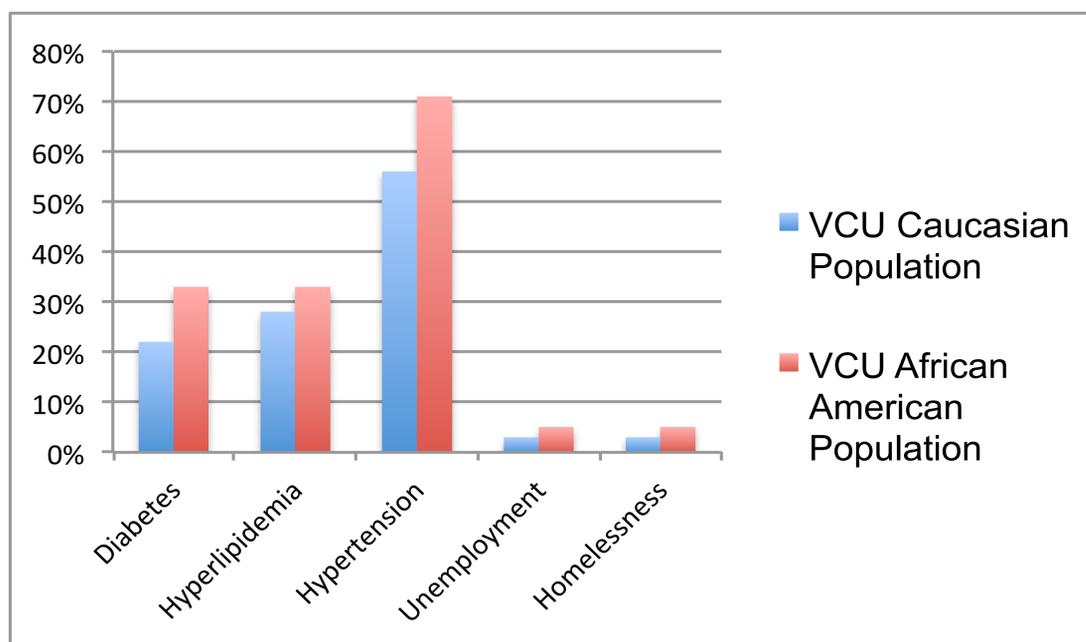
- There are convincing data that suggest that lifestyle factors play a strong role in colorectal carcinogenesis
- Obesity is associated with higher incidence of colorectal cancer (CRC) and increased mortality.
- Racial and ethnic minorities are more likely to develop colorectal cancer when compared to the general population in the US,
- Richmond is made up of 47% of African Americans (AA), with 24% of the total persons in poverty and a median household income of \$45,117.

## Purpose

- We aim to uncover trends in the African American population as compared to the Caucasian population to determine the effect of health disparities in obesity-related risk factors in patients with CRC.



**Figure 1.** The VCU African American (AA) population exhibited higher rates of obesity (33% vs 26%), IBD (38% vs. 33%) and hypertension (71% vs 33%) as compared to AA patients in the other 14 networks.



**Figure 2.** Increased rates of diabetes (33% vs. 22%), hyperlipidemia (33% vs. 28%) and hypertension (71% vs. 56%) were found in the AA population compared to the Caucasian population in the VCU Network.

## Methods

- We used the Virginia Commonwealth University (VCU) network within TriNetX, a global federated health research network that provides access to statistics in electronic medical records of diagnoses, laboratory values and vitals.
- Compared Caucasian and AA patients with a diagnosis of CRC from 14 different health networks in the US from 2010-2019.

## Conclusion

- Results suggests that important comorbidities are more prevalent in AA populations than in the Caucasian populations
- This data highlights the fundamental importance of considering racial and socioeconomic factors when designing screening, treatment and management plans to reduce the mortality of CRC in an underserved community.

## References

1. Influence of obesity on the risk of developing colon cancer. *Gut*. 2006 Feb; 55(2): 285-291
2. Jackson, C.S.; Oman, M.; Patel, A.M.; Vega, K.J. Health disparities in colorectal cancer among racial and ethnic minorities in the United States. *J. Gastrointest. Oncol.* **2016**, 7 (Suppl. S1), S32–S43.