

COVID 19, Diabetes, and Hypertension, and Racial Disparities

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Course Description:

This course will provide the latest information on conditions that have a greater burden of mortality and morbidity among COVID-19 and the impact of racial disparities.

Goal:

Provide attendees with recent

Learning Objectives:

At the conclusion of this course, attendees should be better able to effectively:

1. Understand the relationship of COVID-19 and comorbidities, such as diabetes and hypertension that have a greater burden of mortality and morbidity.
2. Identify risk factors contributing to COVID racial disparities.
3. The optometrist role in Interventions to reduce disparities in COVID-19.
4. Describe interprofessional team strategies for improving care coordination and outcomes.

Abstract

The coronavirus disease 2019 (COVID-19) pandemic exposed longstanding racial and ethnic inequities in health risks and outcomes in the United States. This course will present the latest information comorbidities that have a greater burden of mortality and morbidity among COVID-19.

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COURSE OUTLINE

I. Latest on COVID 19 (2022)

- Snapshot Coronavirus 2 (SARS-CoV-2)
- Minorities, especially Blacks were at an increased risk for serious illness from COVID-19 due to higher rates of underlying health conditions, such as diabetes, hypertension.
 - Over 60% of COVID-19 cases and nearly 50% of deaths in the US have been have occurred among patients in racial/ethnic minority groups.
 - Mortality rate in the US Black population is more than twice that in the White population.

II. Diabetes, Hypertension, and Race Disease Burden: 2022

- Diabetes:
 - More than 133 million Americans are now living with diabetes or prediabetes—an increase of 11 million in the past 2 years.
 - 37.3 million adults with diabetes, 28.7 million were diagnosed, and 8.5 million were undiagnosed. 96 million Americans currently have prediabetes
 - Diabetes and Race
 - 12.1% of non-Hispanic blacks
 - 11.8% of Hispanics
 - Adults with a family income below the federal poverty level had the highest prevalence for both men (13.7%) and women (14.4%).
 - People with less education were more likely to have diagnosed diabetes.
 - COVID-19 and Diabetes
 - Risk of death from COVID-19 4X greater for those with diabetes
 - 40% of people who have died with COVID-19 had diabetes
- Hypertension
 - 116 million Americans (1 of every 3 adults)
 - HTN and Race
 - The prevalence of hypertension is high among certain racial/ethnic minority groups, particularly African American adults
 - Non-Hispanic black adults (56%)
 - Hispanic adults (39%)
 - Individuals with high blood pressure were 2.6 times more likely to require hospital care for severe COVID-19 illness, even when the person had no other serious chronic health condition

III. Factors that contribute to racial health disparities

- Chronic health conditions

- Social determinants of health should be routinely considered in clinical assessment
 - Racism and discrimination
 - Inadequate access to health care
 - Uninsured and to lack a usual source of care
 - Frontline workers
 - Work in industries that expose them to COVID 19
 - more likely to work in the service industries such as restaurants, retail, and hospitality
 - Educational, income, and wealth gaps
 - Live in housing situations, such as multigenerational families or low-income and public housing that make it difficult to social distance or self-isolate

IV. COVID-19 Vaccination and Race

- Data from the Centers for Disease Control and Prevention (CDC) show that 78% of the total population in the United States
- One-dose
 - Blacks- ne dose (10%)
 - Hispanics- one dose 21%

V. Ocular complications and COVID 19

- SARS-CoV-2 relates to the binding of the viral spike protein to its cognate receptor on human host cells— the angiotensin-converting enzyme 2 (ACE-2) receptor.
 - Conjunctivitis/ Uveitis
 - Retina/choroidal
 - Plaquenil complications

VI. Conclusion

- Cases of diabetes, hypertension, and COVID 19 are on the rise, and minority communities, specifically Black population have higher rate infection and mortality.
- Optometrists play a vital role in preventing/reducing the spread of COVID-19 with education, and interdisciplinary collaboration in Black populations.
- Early detection and treatment are crucial in preventing and reducing visual impairment from these conditions in minority populations.

References:

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