COMMUNITY HEALTH CARE ASSOCIATION of New York State

Setting the Stage – Exploring Prevalence Rates and Health Disparities in Hypertension

Hypertension Care & Management Webinar Series

Part One

March 4th, 2022

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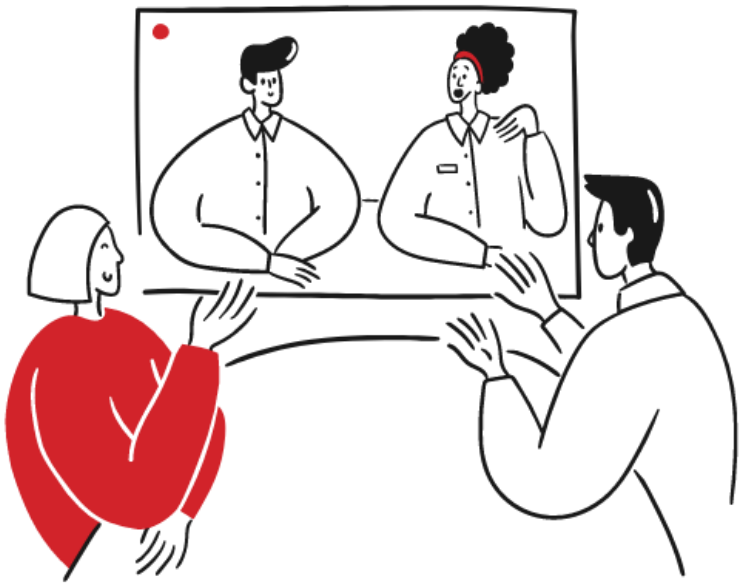
Housekeeping

- Phones have been muted to prevent background noise
- Use the chat box to type questions during the webinar
- This webinar is being recorded and will soon be available to all participants
- A webinar evaluation will be shared with participants



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Conflicts of Interest

There are no disclosures

Objectives

1. Describe disparities in hypertension prevalence, awareness, and control
2. Identify factors that contribute to disparities in hypertension care
3. Review strategies to address disparities in hypertension

New Definition of Hypertension

Systolic BP greater than or equal to 130 mmHg, and diastolic BP greater or equal to 80 mmHg, or currently taking medications.

For an adult 45 years of age without hypertension, the 40-year risk for developing hypertension is 93% for African Americans, 92% for Hispanics, 86% for whites, and 84% for Chinese adults.

J Am Coll Cardiol 2018;71:e127-e248.

Hypertension is highly prevalent in the adult population in the United States, especially among persons older than 60 years of age, and affects approximately 1 billion adults worldwide.

Despite the availability of effective therapy, hypertension remains a significant cause of morbidity and mortality in the United States and a major contributor to cardiovascular disease (CVD), stroke, and chronic kidney disease

HTN Guidelines

The 2017 AHA guideline is an update of the “Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure” (JNC 7), published in 2003.

J Am Coll Cardiol 2018 :71e 127-e2478

Prevalence of Hypertension in USA

The 2017 ACC/AHA hypertension guidelines **lowered the blood pressure** threshold for diagnosis of stage I hypertension to 130-139/80-89 mm Hg (from previous threshold of 140/90 mmHg)

This change resulted in a substantial **increase in the prevalence of hypertension from ~32% to ~46% (or 116 million)** in the United States (US) adult population (among both men and women, across all age groups).

2017 Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults

BP Classification (JNC 7 and ACC/AHA Guidelines)

SBP		DBP	JNC 7	2017 ACC/AHA
<120	and	<80	Normal BP	Normal BP
120–129	and	<80	Prehypertension	Elevated BP
130–139	or	80–89	Prehypertension	Stage 1 hypertension
140–159	or	90-99	Stage 1 hypertension	Stage 2 hypertension
≥160	or	≥100	Stage 2 hypertension	Stage 2 hypertension

- Blood Pressure should be based on an average of ≥2 careful readings on ≥2 occasions
- Adults being treated with antihypertensive medication designated as having hypertension

Hypertension Epidemic

- Hypertension is often termed the “silent killer” because many people with high blood pressure (BP) do not know they have the disease until it has progressed.
- Uncontrolled high BP leads to numerous complications including, but not limited to, heart attack, stroke, aneurysm, heart failure, renal failure, and dementia.
- Hypertension is the primary modifiable risk factor for the development of CVD.

HTN is a significant contributor to CVD morbidity and mortality

Clinical trials have shown that treatment of hypertension reduces the risk of cardiovascular disease outcomes:

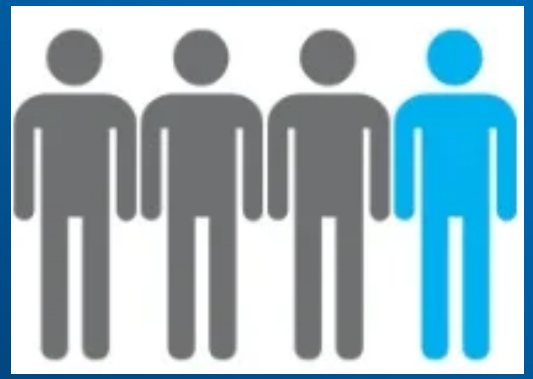
Stroke	↓	35-40%
Myocardial infarction	↓	15-25%
Heart failure	↓	Up to 64%

SPRINT trial

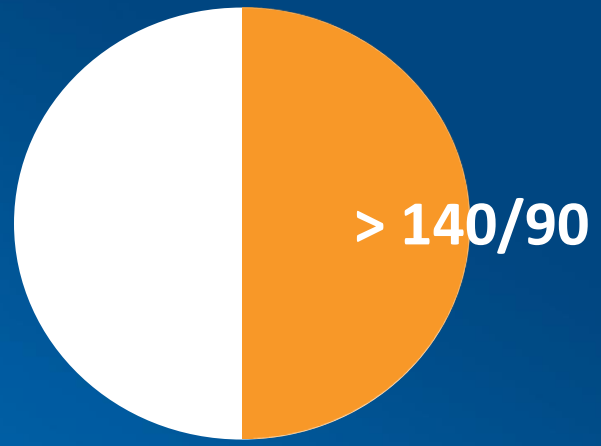
SPRINT showed that among adults with hypertension but without diabetes, lowering systolic blood pressure to a target goal of less than 120 mm Hg, as compared with the standard goal of less than 140 mm Hg, resulted in significantly lower rates of fatal and nonfatal cardiovascular events and death from any cause.

N Engl J Med 2015; 373:2103-2116

In 2019, more than **half a million deaths** in the United States had hypertension as a primary or contributing cause.

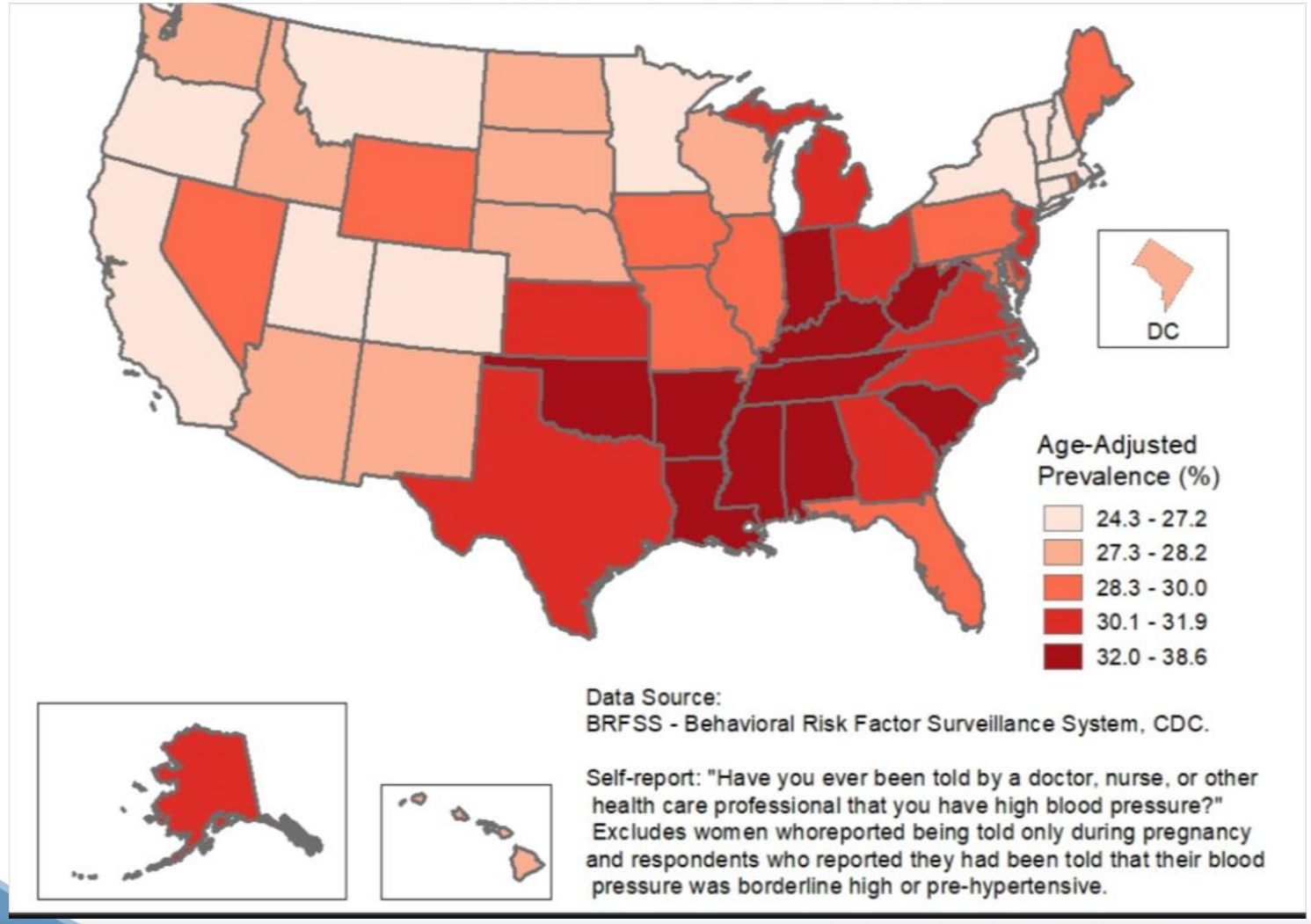


Only about **1 in 4 adults** with hypertension have their condition under control.



About **half of adults** with uncontrolled hypertension have a blood pressure of 140/90 mmHg or higher. This includes 37 million U.S. adults.

Geographic Differences in Hypertension Prevalence, 2017
US adults ages 20 and older



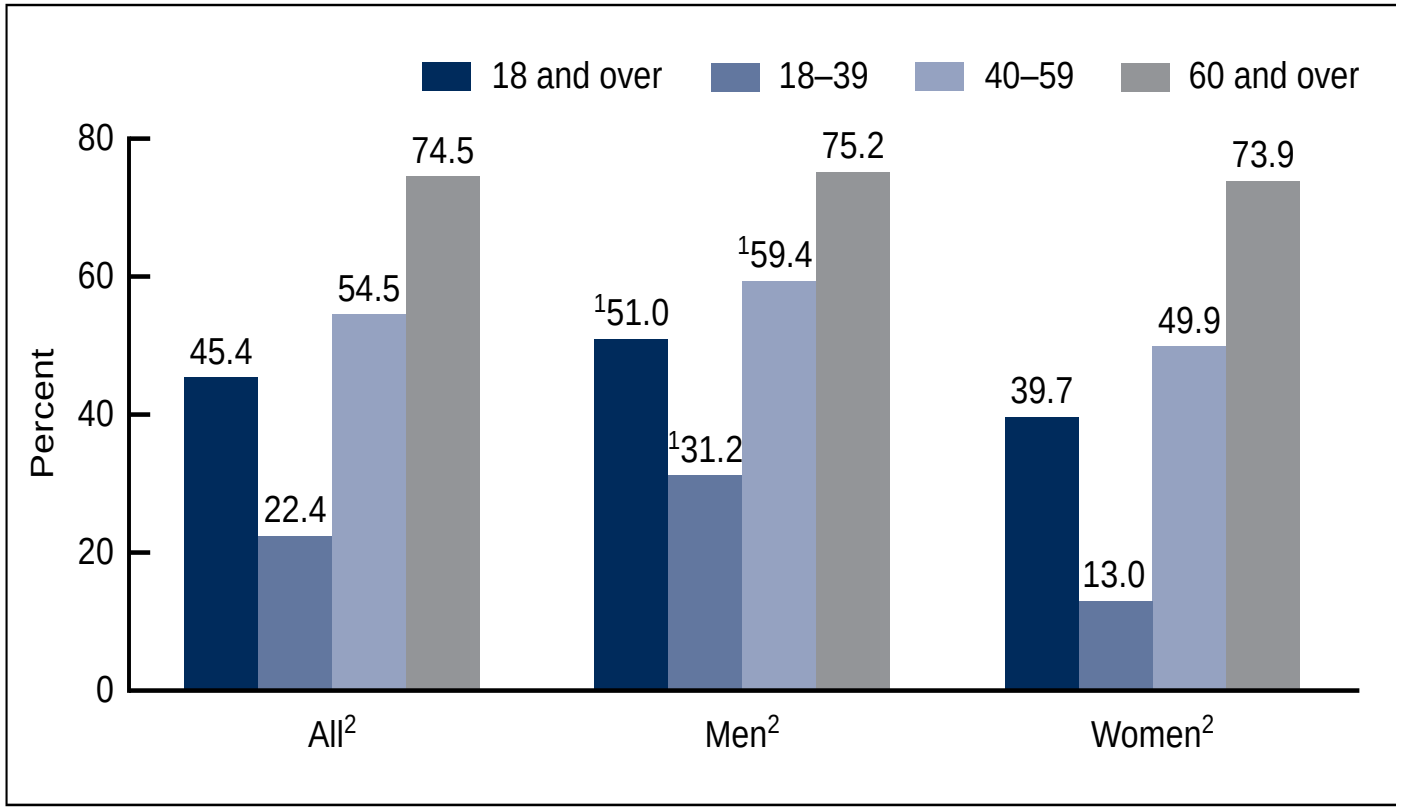
High blood pressure is more common in some areas of the United States than in others. Below is a map showing the self-reported rate of hypertension by state in 2017 (using a definition of HTN as a blood pressure ≥140/≥90 mmHg). However, this map likely underreports the true effect of hypertension in each state, because about 1 in 5 adults with high blood pressure is unaware of it and would not report having it.

Hypertension prevalence estimates in the US population

	SBP/DBP ≥130/80 mm Hg or Self-Reported Antihypertensive Medication†		SBP/DBP ≥140/90 mm Hg or Self-Reported Antihypertensive Medication‡	
Overall, crude	46%		32%	
	Men (n=4717)	Women (n=4906)	Men (n=4717)	Women (n=4906)
Overall, age-sex adjusted	48%	43%	31%	32%
Age group, y				
20–44	30%	19%	11%	10%
45–54	50%	44%	33%	27%
55–64	70%	63%	53%	52%
65–74	77%	75%	64%	63%
75+	79%	85%	71%	78%
Race-ethnicity§				
Non-Hispanic white	47%	41%	31%	30%
Non-Hispanic black	59%	56%	42%	46%
Non-Hispanic Asian	45%	36%	29%	27%
Hispanic	44%	42%	27%	32%

2017 ACC/AHA Hypertension Guidelines

Prevalence of HTN among adults by age and sex
United States adults 2017-18



[1]Significantly different from women within the same age group.
[2]Significant increasing trend by age.

Data from the National Health and Nutrition Survey 2017-2018

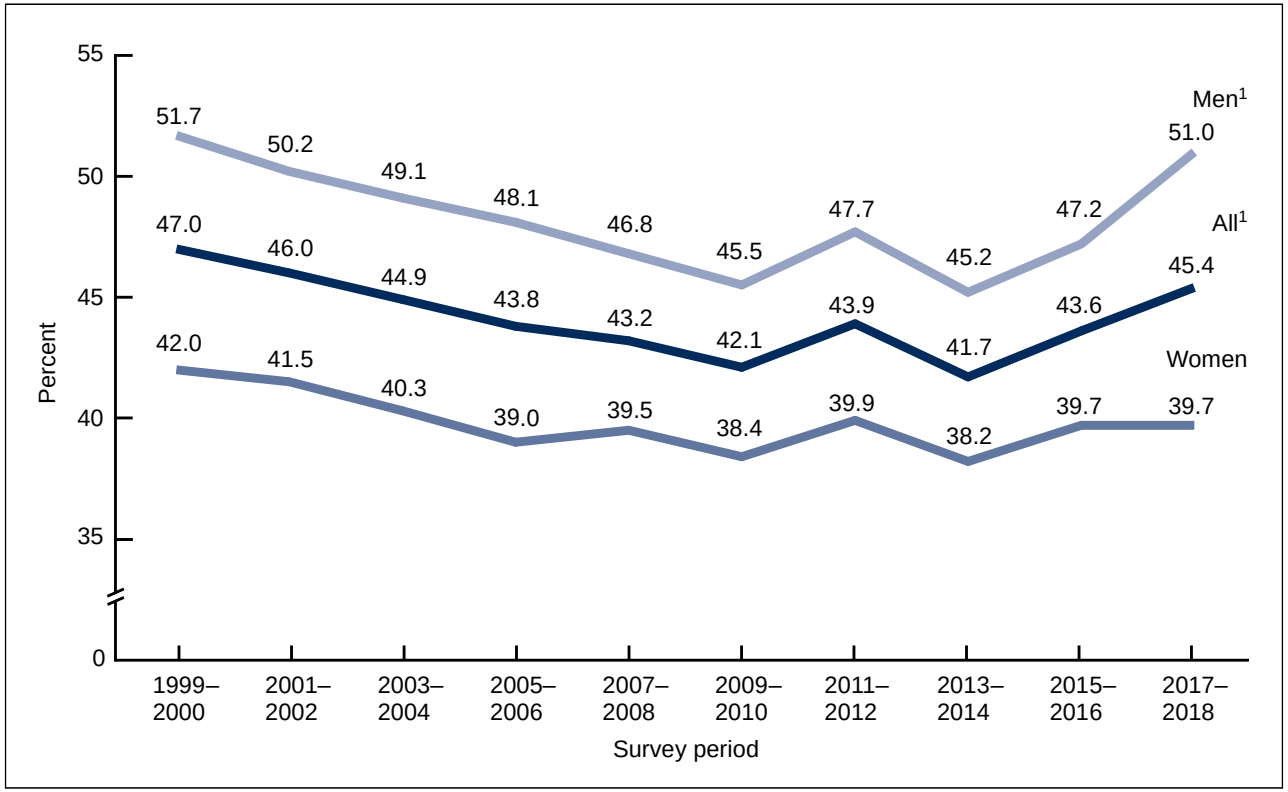
Age-related rise in HTN prevalence

- 22.4% ages 18-39 years
- 74.5% ≥ 60 years

HTN prevalence is higher in men than women 51% versus 39.7%

HTN prevalence increases in women around the time of menopause, similar to (and in some studies surpassing) that of men

Age adjusted trend in HTN prevalence among adults aged 18 and over, by sex: United States 1999-2018



[1]Significant quadratic trend from 1999 through 2018.

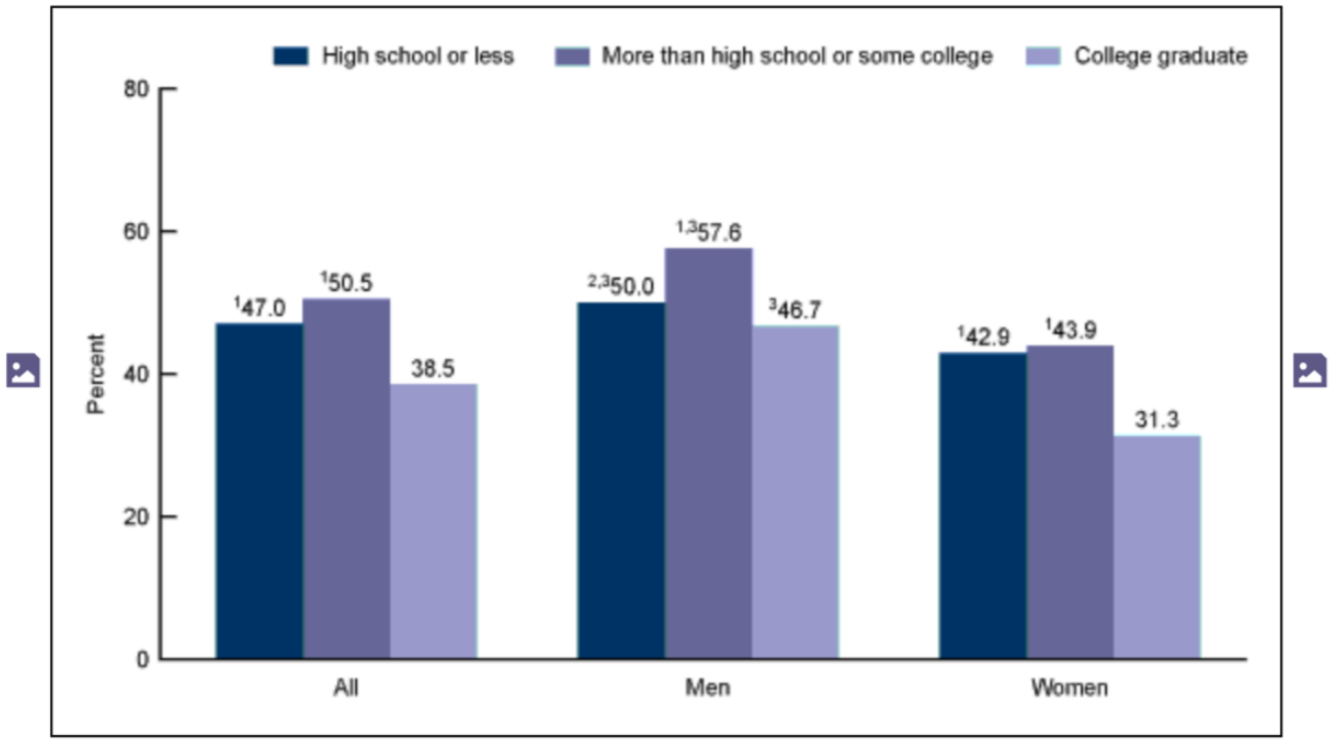
Overall, the age-adjusted prevalence of HTN decreased from 47.0% in 1999–2000 to 41.7% in 2013–2014, and then increased to 45.4% in 2017–2018.

Men followed a similar pattern

However, age-adjusted hypertension prevalence for **women** did not significantly change from 1999–2000 (42.0%) to 2017–2018 (39.7%).

Between 1999–2000 and 2017–2018, the prevalence of hypertension decreased and then increased among men, but no significant trend was observed among women.

Age-adjusted prevalence of HTN among adults aged 18 and over, by sex and education: United States, 2017–2018



[1]Significantly different from college graduate.
[2]Significantly different from some college.
[3]Significantly different from women in the same educational category.

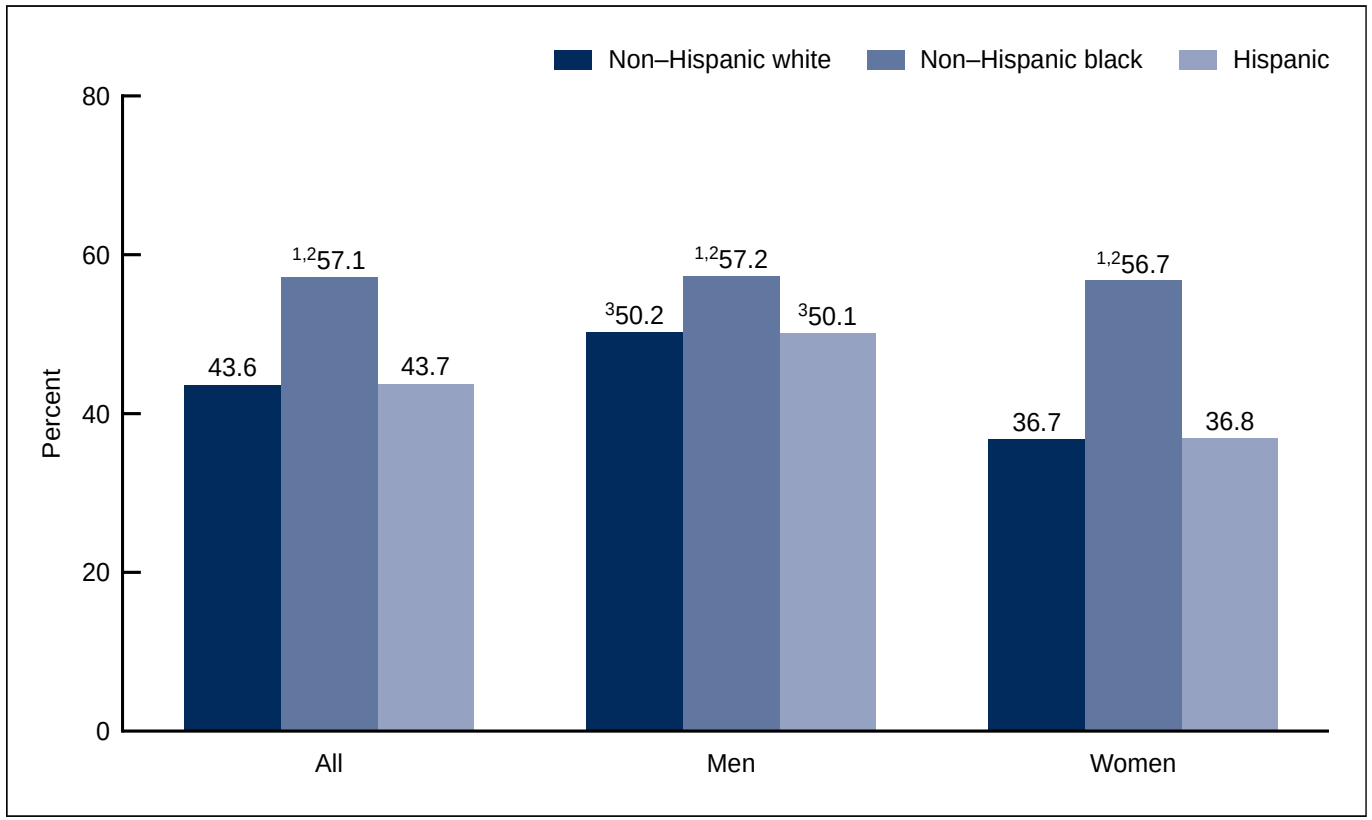
College graduates had a significantly lower prevalence of hypertension than adults with less formal education

Among men, HTN prevalence was highest among adults with more than high school or some college education. The observed difference between men with a high school education or less and those with a college degree was not statistically significant.

Among women, HTN prevalence was significantly lower among college graduates than others with less formal education

Disparities in HTN prevalence, awareness, and control

Age-adjusted prevalence of HTN among adults aged 18 and older, by sex and race and Hispanic origin: United States 2017-18



[1]Significantly different from non-Hispanic white.
[2]Significantly different from Hispanic.
[3]Significantly different from women in the same race and Hispanic-origin group.

Age-adjusted prevalence of HTN was significantly higher among non-Hispanic blacks, than among non-Hispanic white and Hispanic adults

The prevalence of HTN among women is significantly lower in non-Hispanic white and Hispanic adults compared to men

Among non-Hispanic blacks, the prevalence of HTN does not significantly differ by sex

Racial disparities in hypertension prevalence have persisted over time

Racial and Ethnic Disparities in Hypertension

There are significant differences in hypertension prevalence, control rates, and morbidity and mortality based on race/ethnicity

National surveys such as the US National Health and Nutrition Examination Survey (NHANES) have highlighted these differences.

The **National Health and Nutrition Examination Survey** (**NHANES**) is a survey research program conducted by the National Center for Health Statistics (NCHS) to assess the health and nutritional status of adults and children in the United States, and to track changes over time.

The survey combines interviews, physical examinations and laboratory tests.

The NHANES interview includes demographic, socioeconomic, dietary, and health-related questions.

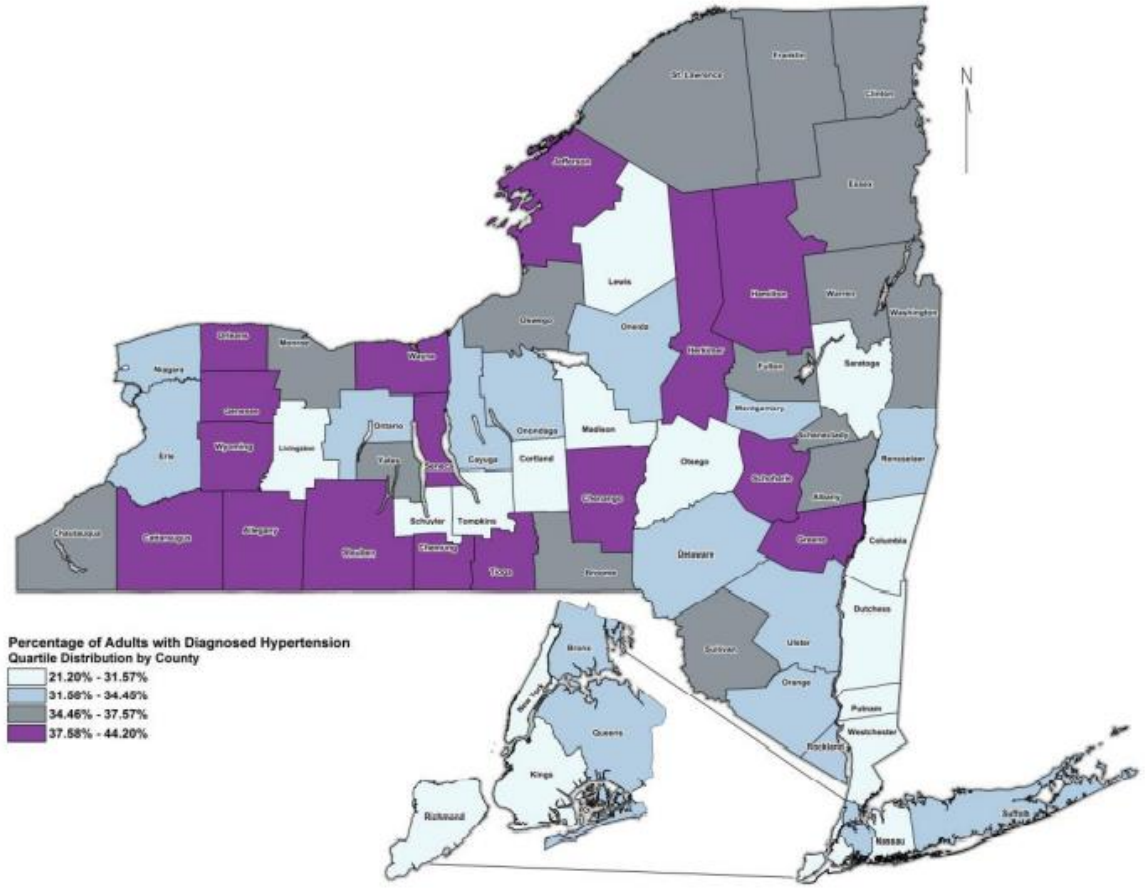
The first NHANES was conducted in 1971, and in 1999 the surveys became an annual event; the first report on the topic was published in 2001.

NHANES findings are used to determine the prevalence of major diseases and risk factors for diseases. Information is used to assess nutritional status and its association with health promotion and disease prevention.

NHANES findings are also the basis for national standards for such measurements as height, weight, and BP.

Prevalence Estimates of Diagnosed HTN in New York State, by county

Percentage of adults with diagnosed hypertension, New York State, BRFSS 2016



In New York State (NYS), an estimated 4.9 million people, or 31.7% of the adult population, have been diagnosed with HTN.

The prevalence of diagnosed HBP varies by county, from **21.2% in New York County to 44.2% in Jefferson County**.

The counties with the highest prevalence rates are: Jefferson (44.2%), Allegany (42.1%), Wayne and Wyoming (40.0%), Greene and Schoharie (39.8%), and Seneca (39.4%).

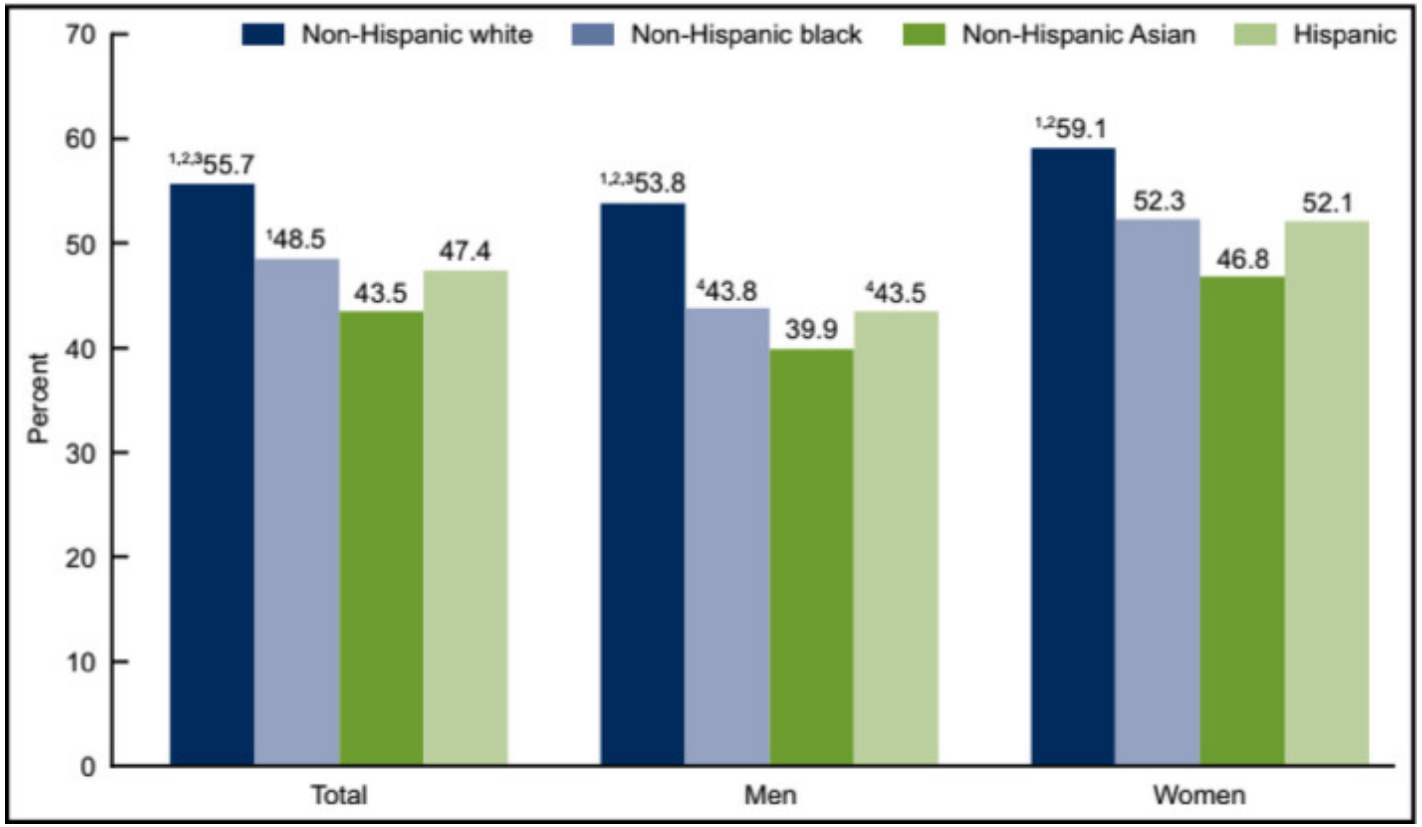
https://www.health.ny.gov/statistics/prevention/injury_prevention/information_for_action/docs/2018-08_ifa_report.pdf

NEW YORK STATE | Department of Health

Hypertension prevalence by age, sex, race/ethnicity among adults in New York City, NYC Health and Nutrition Examination Survey, 2013-2014

Characteristic	Unweighted Total[b]	Weighted Total	Weighted and Age Standardized %[c] (95% Confidence Interval)	*P* Value[d]
Overall	1,476	6,285,749	33.9 (31.4–36.4)	—
Sex				
Male	632	2,942,712	36.2 (32.5–40.0)	.01
Female	844	3,343,037	31.8 (28.5–35.1)	
Age group, y				
20–39	668	2,630,758	10.4 (7.7–13.1)	<.001
40–59	499	2,194,045	40.2 (35.4–44.9)	
≥60	309	1,460,946	64.0 (58.0–69.9)	
Race/ethnicity				
Non-Hispanic white	495	2,201,667	27.5 (23.5–31.4)	<.001
Non-Hispanic black	328	1,336,586	43.5 (38.2–48.8)	
Hispanic	382	1,703964	33.0 (28.4–37.7)	
Non-Hispanic Asian	200	889,666	38.0 (30.4–45.6)	
Racial/ethnic subgroup				
Non-Hispanic white	495	2,201,667	27.5 (23.5–31.4)	<.001
Non-Hispanic black	328	1,336,586	43.5 (38.2–48.8)	
Puerto Rican	143	613,036	34.2 (26.3–42.2)	
Dominican	92	394,423	39.4 (29.9–49.0)	
Central or South American	137	654,180	27.5 (19.8–35.3)	
East or Southeast Asian	131	554,993	39.9 (31.0–48.7)	
South Asian	60	282,881	43.0 (32.1–53.8)	

Prevalence of controlled hypertension by race/ethnicity and sex, United States 2011-2014



In the United States, hypertension control rates in Black, Hispanic, and Asian adults are substantially lower than in White adults.

Uncontrolled HTN has an enormous impact on the health of minorities, accounting for up to one-quarter of all deaths among black adults, primarily from cardiovascular or cerebrovascular causes.

In an NHANES survey, hypertension control rates among non-Hispanic white adults (55.7%) was significantly higher than NHB (48.5%), NHA (43.5%), and Hispanic (47.4%) adults. Women had better HTN control than men all across the races.

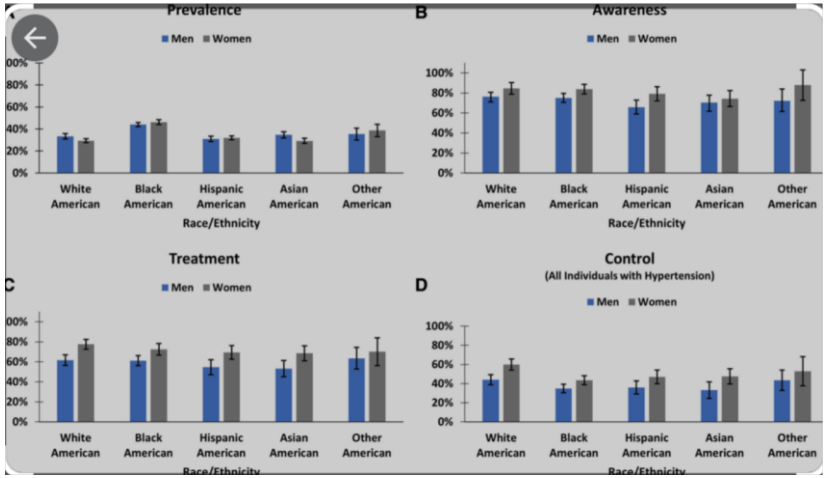
Racial/Ethnic Disparities in Hypertension Prevalence, Awareness, Treatment, and Control in the United States, 2013 to 2018

Prevalence	Black adults
Awareness	Hispanic Adults
	Asian Adults
Treatment	Hispanic Adults
Control	Black adults
	Hispanic Adults
	Asian Adults

Blood Pressure Cascade

While awareness and treatment levels of high blood pressure are similar, racial/ethnic differences in control rates are evident

- Black Americans have higher hypertension prevalence, but similar awareness and treatment rates, and lower control rates compared to White Americans
- When compared with HTN control rates for White adults (49%), control rates are lower in Black (39.2%), Hispanic (40.0%), and Asian (37.8%) Americans
- Hispanic Americans have lower awareness, treatment, and control rates compered to White Americans.
- Asian adults have similar hypertension prevalence, lower awareness (72.5% versus 79.1%, a OR, 0.75 [95% CI, 0.58–0.97], *P*=0.038) but similar treatment rates.



Racial/ethnic differences in hypertension prevalence, awareness, treatment, and control, NHANES 2013-2018

Aggarwal R et al Hypertension 2021;78:1719-1726

Race/Ethnicity	Prevalence		Awareness		Treatment		Control	
		Adjusted odds ratio*		Adjusted odds ratio*		Adjusted odds ratio*		Adjusted odds ratio*
White American	31.4% (29.7%–33.2%)	Reference	79.1% (75.9%–82.4%)	Reference	67.3% (63.3%–71.4%)	Reference	49.1% (44.6%–53.6%)	Reference
Black American	45.3% (43.6%–46.9%)	2.24 (1.97–2.56)	79.7% (76.4%–83.1%)	1.18 (0.94–1.48)	67.2% (63.9%–70.5%)	1.14 (0.93–1.39)	39.2% (35.5%–42.9%)	0.71 (0.59–0.85)
Hispanic American	31.6% (30.0%–33.2%)	0.98 (0.85–1.13)	71.1% (66.8%–75.4%)	0.72 (0.58–0.89)	60.5% (56.2%–64.7%)	0.78 (0.66–0.94)	40.0% (35.5%–44.4%)	0.71 (0.58–0.88)
Asian American	31.8% (29.9%–33.6%)	1.00 (0.87–1.16)	72.5% (67.2%–77.8%)	0.75 (0.58–0.97)	58.8% (53.8%–63.8%)	0.81 (0.65–1)	37.8% (33%–42.6%)	0.68 (0.55–0.84)
Other American	36.6% (32.5%–40.8%)	1.33 (1–1.76)	78.5% (71.4%–85.6%)	1.21 (0.79–1.85)	66.0% (58.6%–73.3%)	1.15 (0.83–1.59)	47.2% (39.2%–55.1%)	1.05 (0.75–1.48)

All estimates were for nonpregnant US adults age >18 years in the National Health and Nutrition Examination Survey (2013-18). Race/ethnicity and sex were determined by self-report.

Major determinants of hypertension disparities

Cardiovascular disease, the leading cause of death in the United States, occurs at the highest rate among black Americans.

As a precursor to cardiovascular disease, hypertension is one of the most important contributors to racial disparities in mortality rate.

Data suggest that among persons under treatment for hypertension, blacks have poorer blood pressure control.

Racial and ethnic differences in blood pressure (BP), regardless of antihypertensive medication use, contribute to cardiovascular disease disparities.

Racial Disparity in HTN Control: Tallying The Death Toll

Annual deaths avoided by parity in BP control between Blacks and Whites with hypertension

Group	Heart Disease	Stroke
Men	3420	1280
Women	2060	910
Overall	5480	2190

Disparity in BP control ➡ 7670 excess deaths/year

Black Americans with HTN have poorer BP control than their white counterparts.

Annals Fam Med 2008; 6:497-502

In the study by Fiscella and Holt find that racial disparities in blood pressure control contribute to nearly 8,000 preventable deaths from heart disease and stroke among blacks every year.
Racial parity in hypertension control would reduce the annual number of deaths from heart disease and stroke by an estimated 5,480 and 2,190

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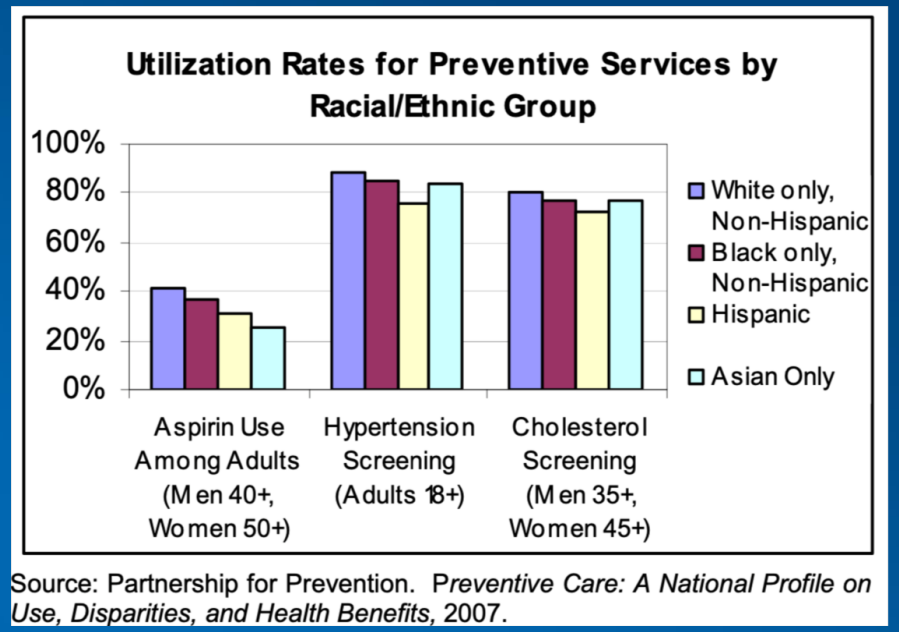
Kevin Fiscella, MD , MPH and Kathleen Holt, PhD- Annals of Family Medicine; November 2008, 6 (6) 497-502

GREATER RISKS, GREATER DEATHS

Many racial/ethnic minority populations have higher rates of CVD and related risk factors. The statistics are stark testimony to that fact.

- CVD age-adjusted death rates are 33% higher for blacks than for the overall population in the U.S.
- Blacks are nearly twice as likely to have a first stroke and are much more likely to die from one than whites.
- American Indians/Alaska Natives die from heart disease much earlier than expected – 36% are under 65 compared with only 17% for the U.S. population overall.



Source: Partnership for Prevention. *Preventive Care: A National Profile on Use, Disparities, and Health Benefits*, 2007.

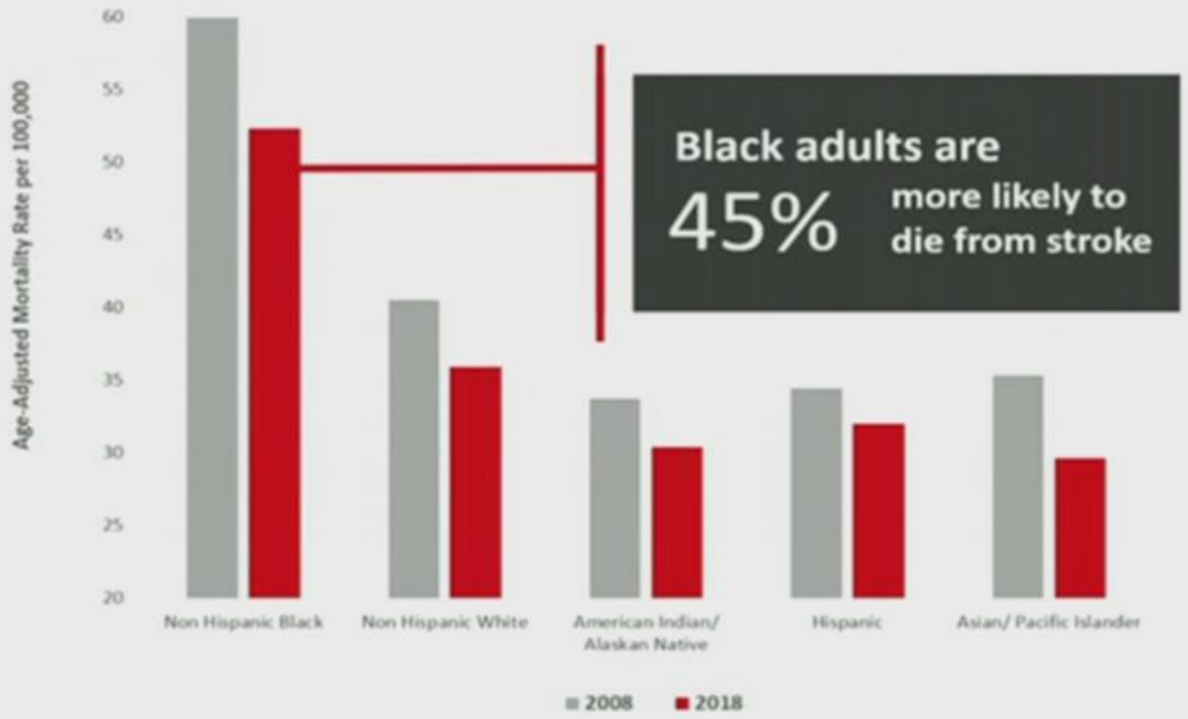
AHA website

American Heart Association.

AGE-ADJUSTED TOTAL STROKE MORTALITY RATES by Race/Ethnicity

The overall death rate due to stroke has also decreased.

But disparities among races and ethnicities remain.



LOWER ACCESS, LOWER QUALITY

Racial/ethnic minority groups more frequently lack health insurance and have limited access to quality health care (specialists and newer technologies), which may be associated with poorer outcomes.

- A 2007 U.S. Census Bureau report showed that more than half of the uninsured are people of color.
- A recent survey found that Hispanics and blacks are less likely than whites to have access to a regular source of medical care, but having health insurance and a medical care can reduce or eliminate disparities in access and quality.
- A recent report on cardiac care quality of racial/ethnic minority groups found evidence of disparities in 84% of the studies examined.
- The meta-analyses of treatment trials show a similar response to antihypertensive medications by race.
- There is evidence for racial disparity in patient adherence to antihypertensive medications, including studies from VA Administration Health System, where fewer differences in access appear to exist (differences in adherence may result from affordability of medications, personal beliefs, anticipated adverse effects, and health literacy).

AHA website

Does data support different treatment regimens based on race/ethnicity?

In African American adults with hypertension but without HF or CKD, including those with DM, initial antihypertensive treatment should include a thiazide-type diuretic or Calcium channel blocker (CCB). Two or more antihypertensive medications are recommended to achieve a BP target of <130/80 mm Hg in most adults, especially in African American adults, with hypertension.

J Am Coll Cardiol 2018 :71e 127-e2478

Black Americans are more likely to have low-renin hypertension and be salt-sensitive

AASK (African American Study of Kidney Disease and Hypertension) – BP lowering effect amlodipine > ramipril

A Cluster-Randomized Trial of Blood-Pressure Reduction in Black Barbershops

Ronald G. Victor, M.D., Kathleen Lynch, Pharm.D., Ning Li, Ph.D., Ciantel Blyler, Pharm.D., Eric Muhammad, B.A., Joel Handler, M.D., Jeffrey Brettler, M.D., Mohamad Rashid, M.B., Ch.B., Brent Hsu, B.S., Davontae Foxx-Drew, B.A., Norma Moy, B.A., Anthony E. Reid, M.D.,* and Robert M. Elashoff, Ph.D.

ABSTRACT

BACKGROUND

Uncontrolled hypertension is a major problem among non-Hispanic black men, who are underrepresented in pharmacist intervention trials in traditional health care settings.

METHODS

We enrolled a cohort of 319 black male patrons with systolic blood pressure of 140 mm Hg or more from 52 black-owned barbershops (nontraditional health care setting) in a cluster-randomized trial in which barbershops were assigned to a pharmacist-led intervention (in which barbers encouraged meetings in barbershops with specialty-trained pharmacists who prescribed drug therapy under a collaborative practice agreement with the participants' doctors) or to an active control approach (in which barbers encouraged lifestyle modification and doctor appointments). The primary outcome was reduction in systolic blood pressure at 6 months.

RESULTS

At baseline, the mean systolic blood pressure was 152.8 mm Hg in the intervention group and 154.6 mm Hg in the control group. At 6 months, the mean systolic blood pressure fell by 27.0 mm Hg (to 125.8 mm Hg) in the intervention group and by 9.3 mm Hg (to 145.4 mm Hg) in the control group; the mean reduction was 21.6 mm Hg greater with the intervention (95% confidence interval, 14.7 to 28.4; P<0.001). A blood-pressure level of less than 130/80 mm Hg was achieved among 63.6% of the participants in the intervention group versus 11.7% of the participants in the control group (P<0.001). In the intervention group, the rate of cohort retention was 95%, and there were few adverse events (three cases of acute kidney injury).

CONCLUSIONS

Among black male barbershop patrons with uncontrolled hypertension, health promotion by barbers resulted in larger blood-pressure reduction when coupled with medication management in barbershops by specialty-trained pharmacists. (Funded by the National Heart, Lung, and Blood Institute and others; ClinicalTrials .gov number, NCT02321618.)

From the Smidt Heart Institute at Cedars–Sinai Medical Center (R.G.V., K.L., C.B., E.M., M.R., B.H., D.F.-D., N.M., A.E.R.), the Department of Biomathematics, David Geffen School of Medicine, University of California, Los Angeles (N.L., R.M.E.), and Kaiser Permanente (J.H., J.B.) — all in Los Angeles. Address reprint requests to Dr. Victor at ronald.victor@cshs.org.

*Deceased.

This article was published on March 12, 2018, at NEJM.org.

N Engl J Med 2018;378:1291-301.
DOI: 10.1056/NEJMoa1717250

During a barbershop hypertension study, barber Wally Riddle took the blood pressure of Ronald G. Victor, MD. Photo by Cedars-Sinai.

A groundbreaking Smidt Heart Institute hypertension study based in African American barbershops is being replicated in the South at Vanderbilt University Medical Center In Nashville, Tennessee. The new study is modeled after several pioneering studies led by the late hypertension specialist Ronald G. Victor, MD.

Based on AHA grant.

Racial Differences in the Impact of Elevated Systolic Blood Pressure on Stroke Risk

Background

Between the ages 45 and 65 years, incident stroke is 2 to 3 times more common in blacks than in whites, a difference not explained by traditional stroke risk factors.

Methods

Stroke risk was assessed in 27 748 black and white participants recruited between 2003 and 2007, who were followed up through 2011, in the REasons for Geographic And Racial Differences in Stroke (REGARDS) study. Racial differences in the impact of systolic blood pressure (SBP) was assessed using proportional hazards models. Racial differences in stroke risk were assessed in strata defined by age (<65 years, 65–74 years, and ≥75 years) and SBP (<120 mm Hg, 120–139 mm Hg, and 140–159 mm Hg).

Results

Over 4.5 years of follow-up, 715 incident strokes occurred. A 10–mm Hg difference in SBP was associated with an 8% (95% CI, 0%-16%) increase in stroke risk for whites, but a 24% (95% CI, 14%-35%) increase for blacks (*P* value for interaction, .02). For participants aged 45 to 64 years (where disparities are greatest), the black to white hazard ratio was 0.87 (95% CI, 0.48–1.57) for normotensive participants, 1.38 (95% CI, 0.94–2.02) for those with prehypertension, and 2.38 (95% CI, 1.19–4.72) for those with stage 1 hypertension.

Conclusions

These findings suggest racial differences in the impact of elevated blood pressure on stroke risk. When these racial differences are coupled with the previously documented higher prevalence of hypertension and poorer control of hypertension in blacks, they may account for much of the racial disparity in stroke risk.

When they looked at the number of incident strokes in REGARDS study (the new strokes that occur, for the same level of BP), blacks were 3 times more likely to have strokes.

MEDICINE *of* THE HIGHEST ORDER

UR MEDICINE

Dr. George Howard, DrPH, Dr. Daniel T. Lackland, DrPH,JAMA Intern Med. 2013 Jan 14; 173(1): 46–51.

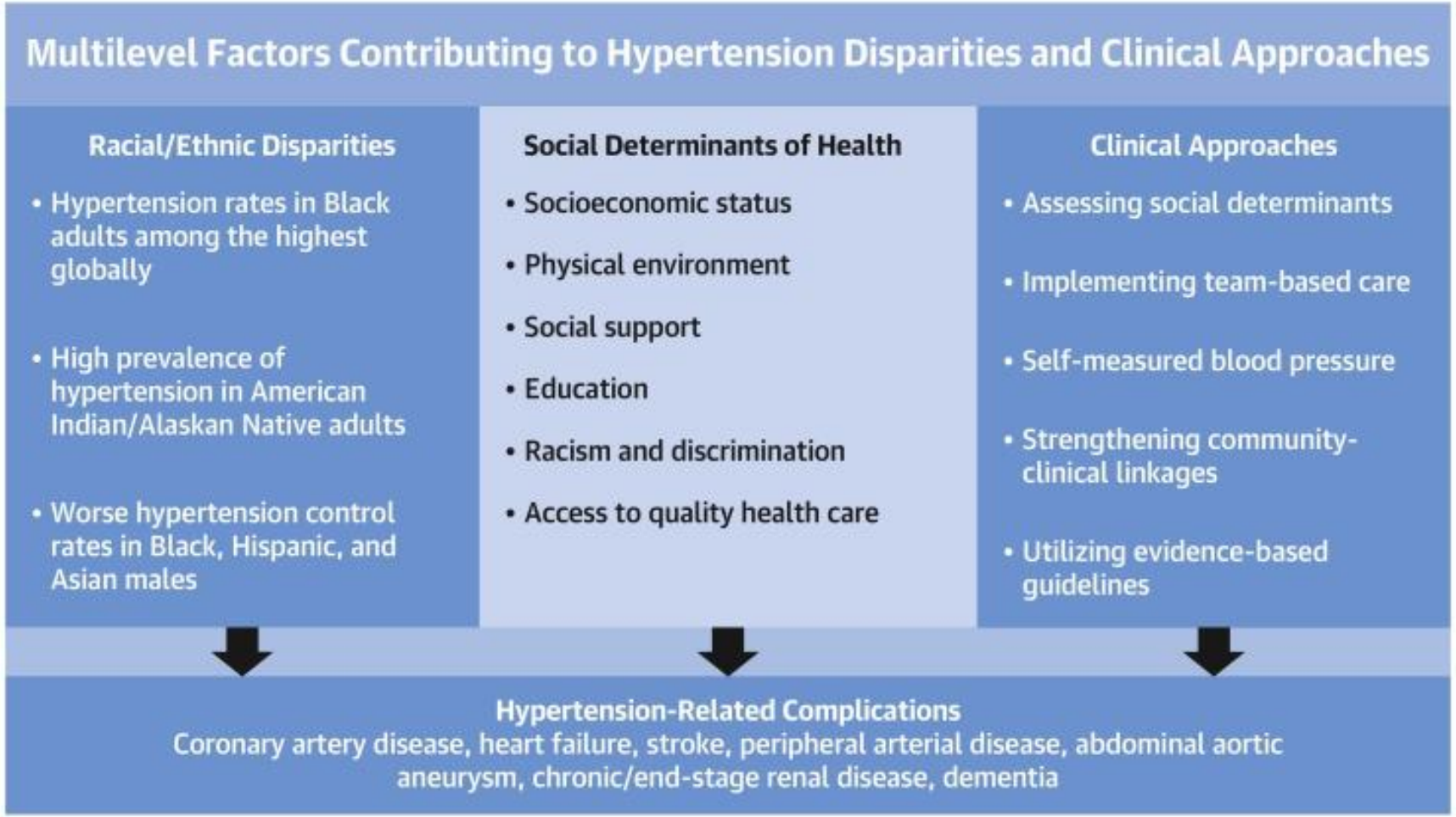
Causes of inequalities in hypertension prevalence, awareness, and control by age, sex, and race/ethnic groups are multifactorial

- ❑ **Genetic/individual factors** – influence of sex hormones affects HTN incidence in prevalence in women across the lifespan, trust of health care system
- ❑ **Clinician/treatment team factors** – awareness of disparities, cultural competency
- ❑ **Community factors** – access to healthcare, access to food
- ❑ **Policy factors** – insurance coverage, reimbursements

"Race should not be considered as a biological construct for disparities or differences in CVD outcomes but rather within the context of socioeconomic, environmental, and systemic issues such as structural racism"

Ogunniyi MO et al J Am Coll Cardiol 2021;78(24):2460-2470

CENTRAL ILLUSTRATION: Multilevel Factors Contributing to Hypertension Disparities and Clinical Considerations



Ogunniyi, M.O. et al. J Am Coll Cardiol. 2021;78(24):2460-2470.

"As rates of uncontrolled hypertension in the US are rising, with racial/ethnic minority individuals being disproportionately impacted by hypertension, the development of targeted public health efforts by race/ethnicity may reduce health disparities and decrease the overall population burden of hypertension."

Hypertension. 2021;78:1719–1726

Racial Differences in Hypertension: Implications for High Blood Pressure Management

The higher blood pressure levels for African Americans are associated with higher rates of stroke, end-stage renal disease and congestive heart failure.

The racial disparities in BP control persist despite longstanding awareness and the development of targeted initiatives to reduce disparities.

Racial and ethnic differences in blood pressure (BP), regardless of antihypertensive medication use, contribute to cardiovascular disease disparities.

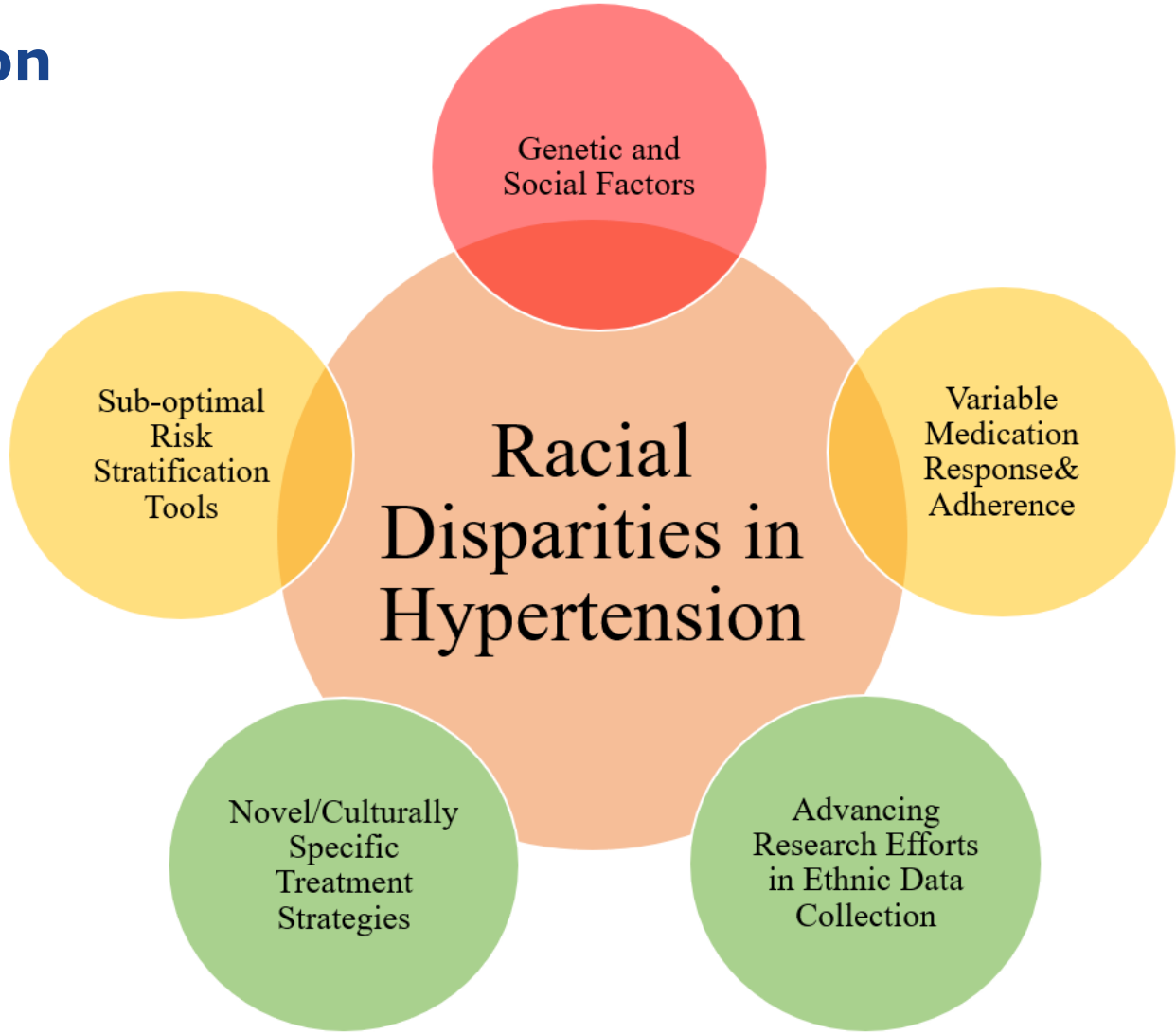
Am J Med Sci. 2014 August ; 348(2): 135–138.

Racial Disparities in Hypertension

Major Factors
- Genetic (ancestry) and environmental factors that contribute to hypertension are poorly understood
- Social determinants of health such as educational status, access to health care, and low income

Reasons for Worse Outcomes
- Risk stratification tools developed in specific racial/ethnic populations
- Suboptimal adherence rates

Future Directions to Improve Disparities
- Evolution of precision medicine
- More refined ASCVD risk tools
- Implementation of health care policies at state and national levels



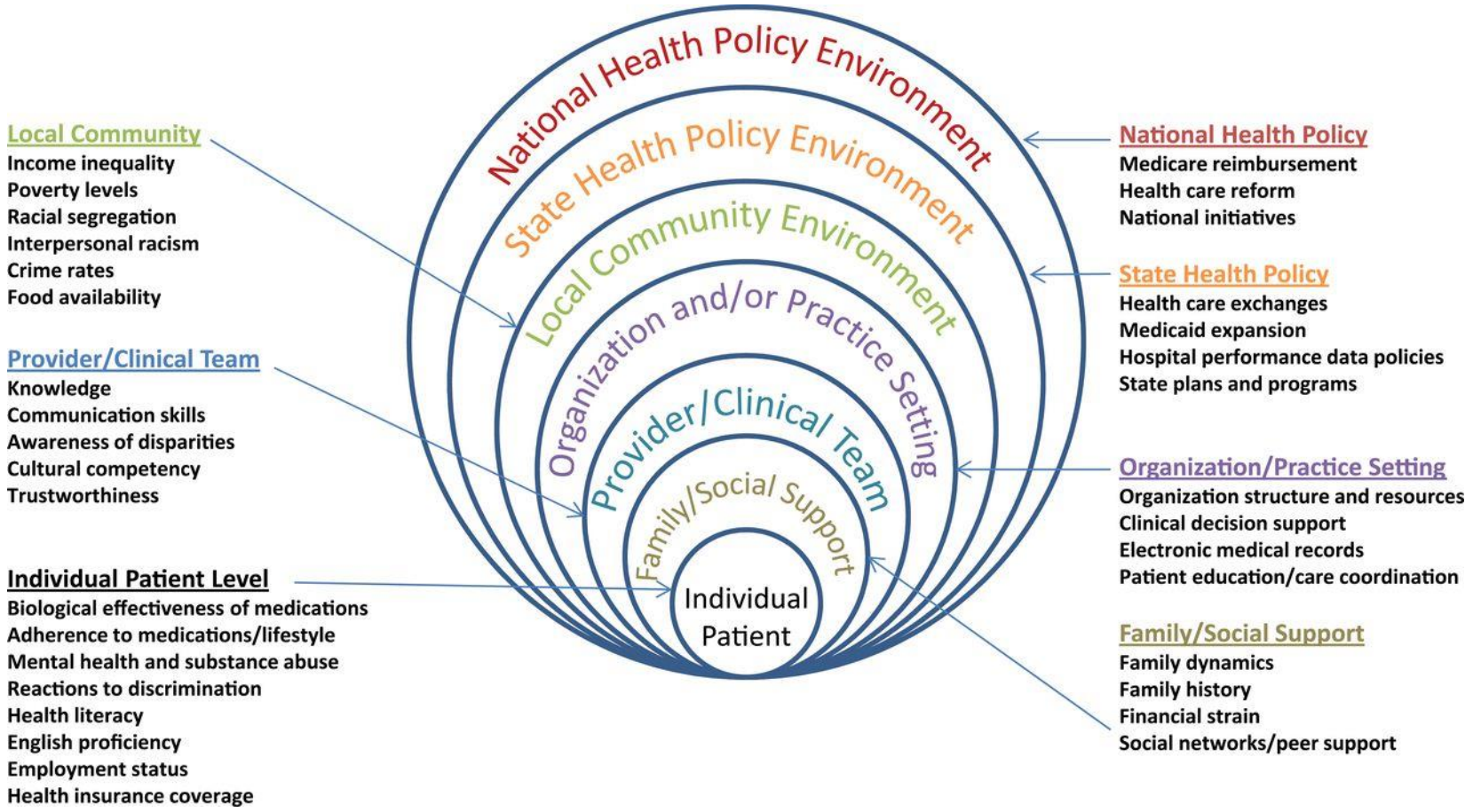
Saeed A et al Racial disparities in hypertension prevalence and management: a crisis control? ACC 4/6/2020

Multilevel barriers to reduce disparities in hypertension prevention and control

Racial disparities in BP control persist despite long-standing awareness and the development of targeted initiatives to reduce disparities.

Behavioral factors.
Patient behaviors are believed to contribute significantly to HTN disparities. Recent studies have demonstrated that adherence is lower in African-American patients than whites, and differences in medication adherence are associated with BP control disparities.
Other behavioral and lifestyle factors (e.g., poor adherence to recommendations about weight management and low-salt diet, heavy drinking and alcoholism, smoking, and use of illicit drugs) may also contribute to disparities in BP control.

Genetic- differences in biological response to treatment.



Am J Hypertens, Volume 28, Issue 6, June 2015, Pages 699–716

Summary

An estimated 45% of U.S. adults have hypertension in 2017–2018, and prevalence increases with age

Hypertension prevalence is highest among non-Hispanic black men and women.

Level of education—specifically, being a college graduate—is associated with lower prevalence of hypertension

Post-menopausal women have a steeper age-related rise in hypertension incidence and prevalence

Considerable challenges remain to understand and overcome ethnic and racial disparities in HTN prevalence, treatment, and control

Part Two: Strategies to Advance Patient Adherence in Hypertension Care

Objective: Identify strategies and interventions meant to accelerate patient self-management, medication adherence, health literacy and more! Topics to include:

1. Shared Decision Making in HTN/CVD
2. Strategies for self-monitoring of BP
3. Team-based care and Telehealth in HTN

Any suggestions or feedback?

Join the Diabetes and CVD Prevention and Control Initiative

Cohort IV Kicks off July 2022 through June 2023!

- Primary Focus Areas Include:
  - Maximizing HIT
  - Referrals to community partners
  - Health education and nutrition counseling
  - Practice transformation and process Improvement
- Project Evaluation

Click here to fill out an interest form!

Thank you!

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