



NATIONAL REGISTER
OF HEALTH SERVICE PSYCHOLOGISTS

Hypertension

Biopsychosocial Assessment and Treatment in Integrated Primary Care Settings

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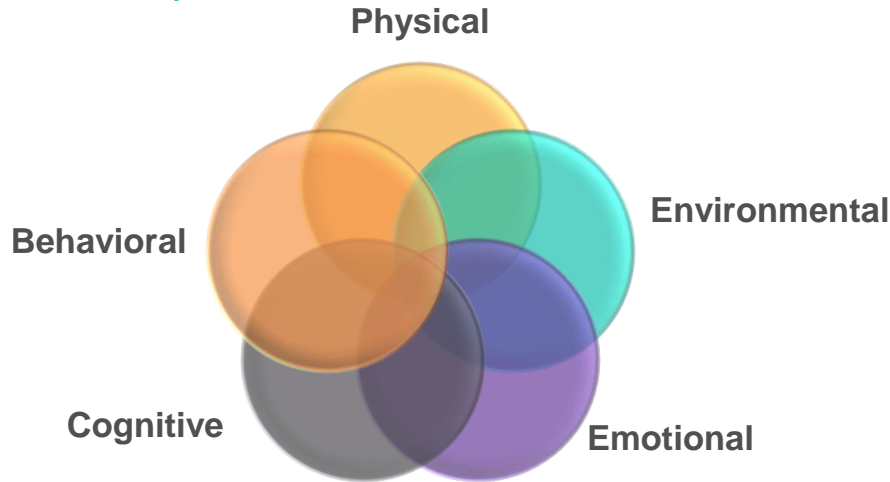
Biopsychosocial factors and treatments related to hypertension

- **Behaviors/Environment**

- Overweight and obesity
- Diet
- Inactivity
- Alcohol

- **Physical**

- Increased age
- Race
- Genetics



- **Cognitive/Emotions/Environment**

- Stress
- Other emotional factors

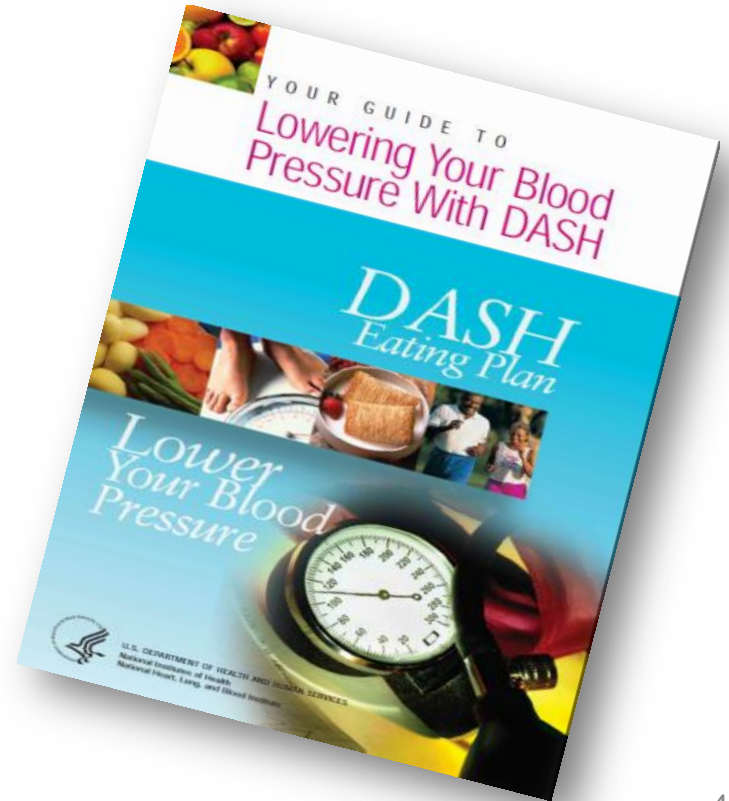
Sodium

- **Actual sodium intake**
 - U.S. adults average daily intake is >3,300 mg/day
 - 90% consume more sodium than recommended
- **Recommended levels of sodium intake 2010**
 - Dietary Guidelines for Americans
 - Reduce sodium to 2300 mg/day

Dietary Approaches to Stop Hypertension (DASH)

DASH Diet

- Emphasizes
 - Fruits & vegetables
 - Low fat dairy
 - Reduced saturated and total fat
- **Goals**
 - Sodium: **2300 mg**
 - Potassium: **4700 mg**
 - Magnesium **500 mg**



Impact of lifestyle modifications

Modification	Recommendation	SBP Reduction
Weight reduction	BMI 18-5-24.9	5-20 mmHg/22 lbs (10 kg)
DASH eating	Fruits, veg, low sat. fat	8-14 mmHg
Reduce sodium	2400 mg sodium	2-8 mmHg
Physical activity	30 min, mod., most days	4-9 mmHg
Moderate ETOH	2/day men; 1/day women	2-4mmHg

Emotional factors

- Causal relation **NOT demonstrated** b/w stress and hypertension
- **Evidence unclear** about relation to hypertension
 - **Anxiety**
 - **Depression**
 - **Hostility/cynical hostility**
 - **PTSD**

Using the 5 A's

to Target Hypertension in
Integrated Primary Care Settings

Assess

- Knowledge
- **Impact**
- Weight
- **Eating habits**
 - **Sodium**
- Physical Activity
- **Alcohol**
- Medication Use
- **Emotional Response**

Advise/Agree

- Importance of **blood pressure reduction**
- Role of **lifestyle change** on hypertension
- Educate about **possible changes**
- Collaborate on **what patient wants to change**

Assist

- **Weight loss**
- Increase **physical activity**
- **Alcohol**
 - **Limited use**
 - Men <1 drink/day; Women <2 drinks/day
- **Diet**
 - **2,300 mg sodium/day limit**
 - **DASH, Mediterranean**

Assist

- **Medication adherence**
- **Stress Management/Relaxation**
- **Emotional Responses**
 - Tailor **recommendations** based on impact
 - Focus on **Functioning** and **Quality of life**
 - Distinguish **immediate** and **chronic effects** on BP

Arrange

- **Follow-up**
 - **Frequency dependent** on target behaviors
 - Consider telephone contact to facilitate change
- **Care manager involvement**
- Consider **vertical integration** methods
 - Classes targeting hypertension
 - Shared Medical Appointments
- **Referrals**
 - **Dietician**
 - **Wellness Center/physical trainer**



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