

Efficacy Of Hypertension Self-Management Classes Among Low-Income Patients Of A Federally Qualified Health Center

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Background

- In the United States, hypertension is more prevalent among Black adults (42.4%) than it is among white adults (29.2%) or Hispanic adults (29%).¹
- There is opportunity to close racial disparities by focusing resources on patient education, skill-building, and self-management.
- Such efforts may be most effective among patient populations with lower health literacy and lower awareness of hypertension and its associated risks.²

Methods

- Lincoln Community Health Center held weekly hypertension classes where attendees learned about hypertension, were trained to take their own blood pressure (BP), and received a BP cuff to use at home.
- Primary outcomes included BP change from first to final class attendance and the number of classes attended.
- Analysis focused on identifying individual patient factors that may have contributed to successful BP reduction and sustained class engagement.

Results

- Participants who attended multiple classes lowered their BP by 20/15 mm HG on average.
- Black participants were more likely to attend multiple classes compared to Hispanic participants ($p = 0.004$).
- None of the 27 Hispanic participants were self-monitoring their BP prior to class attendance compared to 30% of Black participants.

Table 1. Baseline characteristics of participants in Hypertension Self-Management classes held between August 2019 and March 2020, based on Single or Multiple class attendance (n=93)

Characteristic	Single Attenders (n=66)	Multiple Attenders (n=27)	p
Median classes attended	1	3	
Mean Age	53.82**	63.74**	0.0002
Sex			
Female	31 (46.9%)	10 (37.0%)	
Male	35 (53.0%)	17 (63.0%)	
Race/Ethnicity			
Black	32 (48.5%)**	23 (85.2%)**	0.001
Hispanic	25 (37.8%)**	3 (11.1%)**	0.01
White	2 (3.0%)	1 (3.7%)	
Non-identified	7 (10.6%)	0 (0%)	
Self-Monitoring BP Prior			
Yes	8 (12.1%)**	11 (40.7%)**	0.002
No	44 (66.7%)**	14 (51.9%)**	0.0002
Unknown	14 (21.2%)	2 (7.4%)	
Mean Systolic BP (mm HG)	145	153.77	
Mean Diastolic BP (mm HG)	90.23	94.81	

**Statistically significant difference between the groups ($p < 0.05$)

- As seen in Table 1, Participants who attended multiple classes were more likely to be older, Black, and be self-monitoring their BP prior.
- Participants who attended only one class were more likely to be younger, Hispanic, and not self-monitoring their BP prior.

Discussion

- Hypertension self-management classes showed success in reducing hypertension among many of the high-risk participants.
- Hispanic patients were much less likely to attend multiple classes, underscoring the need for culturally and linguistically appropriate class content.³
- The low proportion of Hispanic patients previously monitoring their BP points to an opportunity to improve patient awareness about hypertension among Hispanic populations generally.
- Current reimbursement arrangements and quality reporting standards disincentivize health-beneficial but non-clinical activities such as these classes.
- Further research is needed on how health centers can be proportionally rewarded for engaging in health-beneficial activities that are educational rather than clinical.

References

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