

Medical Students as Health Coaches for Primary Care Patients with Hypertension: a Pilot Program



Presenting Author: Ankur Srivastava, MD

Co-Authors: Sarah Vaughen, Jill Baranowski, Julia Nath, MD, Anna Volerman, MD

Introduction

- Among IM resident panel patients at UoC, 49.5% had poorly controlled HTN
- Half the residents surveyed identified additional counseling on diet and lifestyle modifications would help lower BP
- Pre-Clinical medical students spend most of their first 2 years focused on foundational knowledge
- They are equipped to develop clinical skills and contribute to meaningful care
- QI project to improve patient care by offering 1:1 counseling focused on diet and lifestyle to lower blood pressure <140/80
- Also, to enrich pre-clinical medical students' education

Methods

- Medical students were trained in the basic pathophysiology of HTN, motivational interviewing and evidence based lifestyle and diet modifications to lower blood pressure
- Residents identified patients with poorly controlled HTN and referred to the program
- A standard set of handouts, already used in clinic, was given to each patient
- Students then contacted patients to do counselling

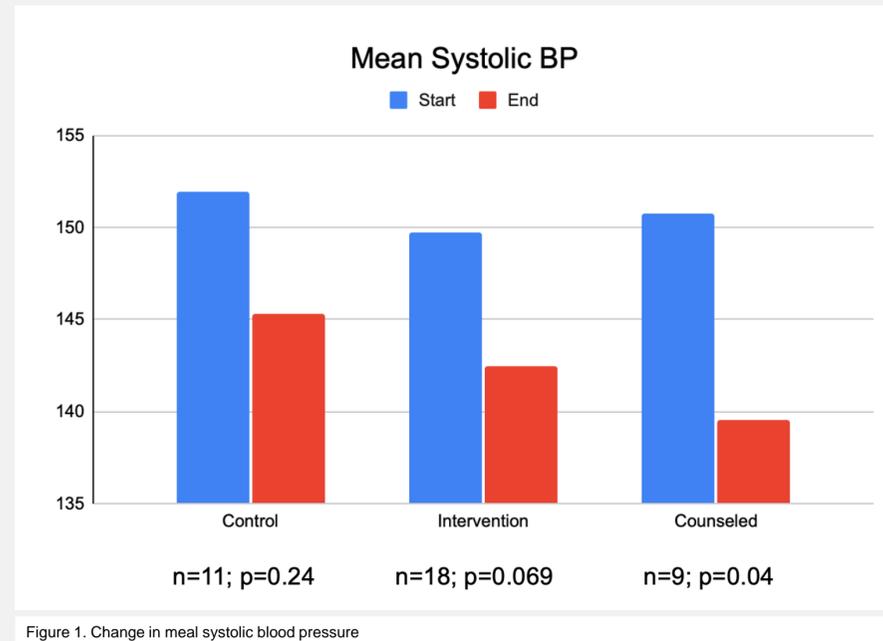


Figure 1. Change in meal systolic blood pressure

		Control	Intervention	Counseled*
	Total Patients**	11	18	9
Start	Mean Systolic	152	150	151
	Mean Diastolic	80	84	83
	% <140/90	27%	17%	11%
End	Mean Systolic	145	142	140
	Mean Diastolic	76	83	84
	% <140/90	36%	35%	33%
Delta	Mean Systolic	-7.11	-8.50	-11.50
	Mean Diastolic	-4.22	-2.21	-1.75
	% <140/90	9%	19%	22%

Table 1. Change in mean systolic and diastolic blood pressure between control versus intervention group and those counseled in the intervention group

*9 patients in the intervention group were contacted but did not complete any counseling sessions, either because they opted out or were unreachable after 3+ call attempts, so only patients that completed 1 or more counseling session were included in the "Counseled" group

**Not all patients had new BP measurements at the time of analysis. Control 3/11, Intervention 4/17, and Counseled 1/8 had no new BP readings.

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Results

- 5 MS2s were recruited
- 29 patients referred, 11 assigned to control group and 18 to intervention
- 84 call attempts were made
- 14 completed sessions with 9 patients, with 10 goals set
- Mean session time 16 minutes
- Most common goals: exercise, measuring BP, diet and sleep
- Initially, mean systolic blood pressure in control and intervention group was poorly controlled
- Completed counseling group had the largest change in systolic blood pressure, p=0.3
- All MS volunteers felt more confident in their skills and felt their work enriched their training

Conclusion

- While not significant, those who completed motivational interviewing based counselling had a reduction in their systolic blood pressure
- Establishing contact with patients was difficult given schedule constraints for medical students
- Medical students felt empowered in their training, considering primary care as a career path
- Future directions include recruiting more patients and finding ways to easily establish contact with patients