

1-9-2026

Staff Education to Enhance Provider Knowledge on Lifestyle Modification for Hypertension Management

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College of Nursing

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Walden University
2026

Executive Summary: Staff Education Project

Staff Education to Enhance Provider Knowledge on Lifestyle Modification for
Hypertension Management

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Executive Summary Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

February 2026

Summary

A doctor of nursing practice (DNP) staff education project was designed to enhance healthcare providers' knowledge of lifestyle interventions for hypertension management. At the practice site, primary healthcare providers were not regularly integrating lifestyle counseling. The practice-focused question guiding this project was: In primary care providers, how does implementing an evidence-based lifestyle education training program for hypertension management affect provider knowledge? An in-person educational session was provided to ten (10) healthcare practitioners who voluntarily participated. Pre- and post-training knowledge assessments were the analytical techniques employed to examine changes in provider comprehension of lifestyle-based hypertension care. Descriptive statistics and paired-sample tests were used to analyze the data to identify any notable shifts in provider expertise. Project findings showed that clinicians showed quantifiable gains in their understanding of lifestyle treatments. The mean pretest score rose from 9 to a post-test mean of 14.20, indicating a considerable improvement in knowledge scores. A highly significant improvement ($p < .001$) was demonstrated by statistical analysis, indicating the efficacy of the education project in enhancing provider knowledge (Rababah et al., 2021). These findings imply that comprehensive training can effectively close knowledge gaps and advance patient-centered, evidence-based hypertension therapy. This project has had significant implications for nursing. The project highlights the crucial role advanced practice nurses can play in facilitating the systems-level integration of lifestyle counseling into hypertension treatment, promoting provider education, and demonstrating evidence-based interventions.

Background

One of the main risk factors for cardiovascular conditions like heart failure, stroke, and coronary heart disease is hypertension, or increased blood pressure. The risks of these illnesses can be effectively reduced by lowering blood pressure to normal ranges. Numerous risk factors for hypertension are lifestyle-related, including cigarette smoking, a diet heavy in fat and salt, and physical inactivity. A healthy lifestyle is acknowledged to include physical activity. The organization's current practice indicates that, despite national recommendations emphasizing non-pharmacological treatments (e.g., diet, exercise, weight control), practitioners are not frequently incorporating lifestyle counseling into patient care. It was concerning to observe that a sizable percentage of patients at the medical center still had uncontrolled blood pressure even after taking medication. Further research revealed that lifestyle modification counseling was not always recorded and was frequently omitted from patient visits. Primary care physicians and clinic administrators acknowledged that they are aware of lifestyle standards. Still, they noted that they lack the necessary support and training to provide patients with systematic lifestyle education. The team's surveys and interviews revealed that there was no official lifestyle education training available for managing hypertension.

The practice-focused question guiding this project was: In primary care providers, how does implementing an evidence-based lifestyle education training program for hypertension management affect provider knowledge? The purpose of this staff education program was to develop, implement, and evaluate an evidence-based provider training program aimed at enhancing knowledge in lifestyle counseling for the management of hypertension. The objective was to increase the ability of providers to provide lifestyle

instruction based on guidelines, which would ultimately improve patient outcomes and treatment quality.

To close the current practice gap, a substantial body of research emphasizes the value of provider education and structured training in lifestyle counseling for the management of hypertension. Structured competencies for the treatment of hypertension can inform the development of effective provider education initiatives, as demonstrated by Watson et al. (2021). The study provides fundamental evidence that competency-based training enhances provider readiness, despite its descriptive nature (Level V, Grade B). Even inexpensive training videos significantly increased provider knowledge in Tanzania, according to Edward et al. (2022), demonstrating that systematic education interventions can raise provider competence (Level II, Grade B). Similarly, Odu (2024) showed that even in low-resource settings (Level III, Grade B), self-paced, mobile-based training programs enhanced provider knowledge at scale.

In a high-quality systematic review and meta-analysis of RCTs, Yao et al. (2021) discovered that communication training greatly enhanced the clinical outcomes and efficacy of provider counseling for patients with diabetes and hypertension (Level I, Grade A). Belizan et al. (2020) highlighted provider-level hurdles that impede effective care of hypertension (Level V, Grade B), such as inconsistent protocols, inadequate training, and poor implementation of guidelines. In their evaluation of the literature on lifestyle-based therapies, Dhungana et al. (2022) highlighted common obstacles that underscore the need for structured provider education (Level V, Grade B), including a lack of time, training, and resources.

Overall, there is moderate to strong evidence in favor of provider education for the management of hypertension. Systematic reviews of RCTs provide the strongest level of evidence (Level I, Grade A) (Yao et al., 2021), confirming that provider training, particularly that focusing on communication, has a favorable effect on patient outcomes and provider practice. The urgent need for organized, evidence-based training programs is underscored by supporting research that consistently identifies knowledge gaps and implementation obstacles among providers, utilizing quasi-experimental (Level II–III) and descriptive/qualitative designs (Level IV–V). The development and evaluation of an evidence-based lifestyle education training program for primary care physicians is justified by this body of research as a means of enhancing hypertension management and lessening the burden of uncontrolled blood pressure.

Staff Education Project Development

Primary healthcare professionals (nurses, clinical officers, and primary care physicians) who handle hypertensive patients at the chosen clinical site were the voluntary participants in the project. Providers who are actively involved in patient education and hypertension control are among the inclusion requirements. Administrative personnel and healthcare professionals who are not directly responsible for patient care are excluded.

A planned staff education program aimed at enhancing providers' knowledge and skills in lifestyle counseling for hypertension management was implemented to carry out the project. The procedure consisted of creating training materials with an evidence base in accordance with national and international standards, and delivering instruction in interactive sessions that include case studies, lectures, and role-plays on how to counsel

patients effectively. Distribution of instructional materials (algorithms, checklists, and handouts) to encourage continued provider practice. Lastly, it provided follow-up assistance and recurring reminders to reinforce training.

Underutilization of non-pharmacologic therapies has been repeatedly associated with knowledge gaps, which contribute to patients' persistently uncontrolled blood pressure even when they take medication (Ordunez et al., 2024). Ten healthcare professionals received training through the use of interactive workshops, current clinical recommendations, and useful counseling tools as part of an organized, evidence-based staff education program. The primary evaluation measure was knowledge tests conducted before and after training. The findings showed a significant gain in provider knowledge after the intervention, with post-training scores significantly outperforming baseline. This newfound understanding suggests that focused, research-based training can improve providers' readiness to incorporate lifestyle counseling into the treatment of hypertension.

Results

Table 1

Pre-posttest mean and p-value

Participant	Pretest Mean	Post-test Mean	p-Value
10	9	14.20	<.001

Ten primary healthcare providers participated in the project's training intervention on lifestyle counseling for managing hypertension. The mean pretest score rose from 9 to a post-test mean of 14.20, indicating a considerable improvement in knowledge scores. A highly significant improvement ($p < .001$) was demonstrated by statistical analysis,

indicating the efficacy of the education project in enhancing provider knowledge. The project helped to increase the organization's ability to offer evidence-based treatment for hypertension. Better provider expertise enables the medical staff to provide lifestyle counseling more successfully, which is crucial for lowering morbidity associated with hypertension and enhancing patient outcomes. The project also fostered a culture of lifelong learning and professional growth, aligning with the organization's objectives of patient-centered care and quality improvement.

The project was limited in several ways. The generalizability of the findings is constrained by the small sample size ($n = 10$). Because healthcare providers who were more motivated or interested in managing hypertension would have been more likely to participate, self-selection bias may have potentially affected the findings. Additionally, the project only tested short-term knowledge development; its influence on clinical practice and longer-term retention were not assessed (Dziadkowiec, 2025). These limitations might have limited findings on sustainability and exaggerated the observed effect size.

This project shows that adopting targeted, research-based educational interventions in primary care settings is both feasible and beneficial. The results are applicable beyond the local area, particularly in environments with limited resources and few opportunities for systematic training. The study promotes wider implementation of comparable interventions to increase workforce capacity and enhance chronic illness management globally by emphasizing the quantifiable benefit of provider education on knowledge improvement.

Conclusions

Healthcare professionals (HCPs), particularly nurses, who play a vital role in community health, have a fundamental responsibility to manage patients with chronic disorders. The practice site's capacity to treat hypertension with evidence-based, non-pharmacological therapies was directly strengthened by the notable increases in healthcare practitioners' knowledge resulting from the implementation of the lifestyle counseling education program. The project enhanced organizational preparedness to improve patient outcomes and align practice with national hypertension management recommendations by providing doctors with the necessary tools to deliver consistent lifestyle counseling.

Further recommendations that might be considered include improving knowledge retention. Future initiatives should involve extending the program to a larger group of healthcare providers, implementing regular refresher courses, and assessing the long-term effects on patient outcomes, including blood pressure control and adherence to lifestyle modifications (World Health Organization, 2022). Sustainability could be further strengthened by incorporating organized lifestyle counseling documentation into the electronic health record.

The project emphasizes the vital leadership role that nurses play in patient education, interdisciplinary teamwork, and the management of chronic diseases in nursing practice. Nurses can actively support better health outcomes and higher-quality care by developing their lifestyle counseling competencies (Znyk et al., 2024). By promoting fair access to evidence-based hypertension care, this project contributes to constructive social change, particularly for patients who may primarily rely on lifestyle

changes due to the high cost of medications or accessibility challenges—prioritizing lifestyle education that is culturally appropriate guarantees inclusivity and gives various patient populations the confidence to take an active role in their own care (World Health Organization, 2022). By addressing provider training gaps and promoting preventive measures that lessen the burden of chronic disease at the community level, the effort ultimately improves health equity.

References

- Belizan, M., Alonso, J. P., Nejamis, A., Caporale, J., Copo, M. G., Sánchez, M. & Irazola, V. (2020). Barriers to hypertension and diabetes management in primary health care in Argentina: Qualitative research based on a behavioral economics approach. *Translational Behavioral Medicine*, 10(3), 741-750.
<https://doi.org/10.1093/tbm/ibz040>
- Dhungana, R. R., Pedisic, Z., & de Courten, M. (2022). Implementation of non-pharmacological interventions for the treatment of hypertension in primary care: A narrative review of effectiveness, cost-effectiveness, barriers, and facilitators. *BMC Primary Care*, 23(1), 298. <https://doi.org/10.1186/s12875-022-01884-8>
- Dziadkowiec, O. (2025). Importance of Limitation Sections in Clinical Research and Quality Improvement Manuscripts. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 54(3), 263-267.
- Edward, A., Kagaruki, G. B., Manase, F., Appel, L. J., & Matsushita, K. (2022). Effectiveness of instructional videos for enhancing healthcare provider competencies for hypertension management—a pre-post study in primary healthcare settings, Tanzania. *BMC Health Services Research*, 22(1), 721.
<https://doi.org/10.1186/s12913-022-08064-5>
- Odu, J., Osi, K., Nguyen, L., Goldstein, A., Appel, L. J., Matsushita, K., & Thomas, M. P. (2024). On-demand mobile hypertension training for primary health care workers in Nigeria: a pilot study. *BMC Health Services Research*, 24(1), 444.
<https://doi.org/10.1186/s12913-024-10693-x>

- Ordunez, P., Campbell, N. R., DiPette, D. J., Jaffe, M. G., Rosende, A., Martinez, R., ... & Brettler, J. (2024). HEARTS in the Americas: targeting health system change to improve population hypertension control. *Current Hypertension Reports*, 26(4), 141-156. <https://doi.org/10.1007/s11906-023-01286-w>
- Rababah, J. A., Al-Hammouri, M. M., & AlNsour, E. A. (2021). Effectiveness of an educational program on improving healthcare providers' knowledge of acute stroke: A randomized block design study. *World journal of emergency medicine*, 12(2), 93. <https://doi.org/10.5847/wjem.j.1920-8642.2021.02.002>
- Watson, K. E., Tsuyuki, R. T., Beahm, N. P., Sedore, R., & Bell, A. (2021). The assessment of educational competencies for the Hypertension Canada Professional Certification Program (HC-PCP) is designed to implement hypertension guidelines into primary care. *Canadian Pharmacists Journal/Revue des Pharmaciens du Canada*, 154(4), 271-277. <https://doi.org/10.1177/17151635211016493>
- World Health Organization. (2022). *WHO guideline on self-care interventions for health and well-being, 2022 revision*. World Health Organization.
- Yao, M., Zhou, X. Y., Xu, Z. J., Lehman, R., Haroon, S., Jackson, D., & Cheng, K. K. (2021). The impact of training healthcare professionals' communication skills on the clinical care of diabetes and hypertension: A systematic review and meta-analysis. *BMC Family Practice*, 22(1), 152. <https://doi.org/10.1186/s12875-021-01504-x>

Znyk, M., Kostrzewski, S., & Kaleta, D. (2024). Nurse-led lifestyle counseling in Polish primary care: The effect of current health status and perceived barriers. *Frontiers in public health*, 12, 1301982. <https://doi.org/10.3389/fpubh.2024.1301982>

Appendix B: Results

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	5	50.0	50.0	50.0
	Female	5	50.0	50.0	100.0
	Total	10	100.0	100.0	

Ethnicity of the providers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	White	3	30.0	30.0	30.0
	Black	5	50.0	50.0	80.0
	Hispanic	2	20.0	20.0	100.0
	Total	10	100.0	100.0	

Level Of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	7	70.0	70.0	70.0
	University	2	20.0	20.0	90.0
	Tertiary	1	10.0	10.0	100.0
	Total	10	100.0	100.0	

Descriptive Statistics For Pre- and Post-knowledge assessment Test

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Provider knowledge before implementation of Lifestyle Counseling Education program	10	7	11	90	9.00	1.155
Provider knowledge After implementation of Lifestyle Counseling Education program	10	13	15	142	14.20	.632
Valid N (listwise)	10					

Descriptive Statistics For Age of Participants

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Age	10	29	60	475	47.50	9.525
Valid N (listwise)	10					

Paired Samples Test

		Paired Differences					Significance			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	Provider knowledge before implementation of Lifestyle Counseling Education program - Provider knowledge After implementation of Lifestyle Counseling Education program	-5.200	1.398	.442	-6.200	-4.200	-11.759	9	<.001	<.001