

## SMART-HTN NURSE CARE: EFEKTIVITAS HYBRID NURSE-LED SELF-MANAGEMENT TERHADAP KEPATUHAN PENGOBATAN DAN TEKANAN DARAH PASIEN HIPERTENSI

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| Article Info                                                                                                                                                                                                                                   | ABSTRAK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <p><b>Article History:</b><br/> Received 21/08/2026<br/> Revised -<br/> Accepted 02/09/2026</p> <hr/> <p><b>Keywords:</b><br/> Hypertension;<br/> Medication Adherence;<br/> Nurse-Led Care;<br/> Primary Healthcare;<br/> Self-Management</p> | <p>Hipertensi merupakan tantangan pelayanan kesehatan karena rendahnya kepatuhan pengobatan berkontribusi terhadap kegagalan pengendalian tekanan darah dan peningkatan risiko komplikasi kardiovaskular. Edukasi konvensional yang bersifat episodik belum optimal dalam mendukung self-management pasien secara berkelanjutan. Penelitian ini bertujuan menganalisis efektivitas SMART-HTN Nurse Care, suatu hybrid nurse-led self-management yang mengintegrasikan edukasi tatap muka, Buku Saku Digital, dan monitoring mingguan oleh perawat terhadap kepatuhan pengobatan dan tekanan darah pasien hipertensi. Penelitian menggunakan desain quasi-experimental pretest-posttest with control group yang melibatkan 62 pasien hipertensi, terdiri atas kelompok intervensi (n=31) dan kontrol (n=31). Kelompok intervensi memperoleh SMART-HTN Nurse Care selama delapan minggu, sedangkan kelompok kontrol memperoleh pelayanan rutin. Kepatuhan pengobatan diukur menggunakan Morisky Medication Adherence Scale-8, sedangkan tekanan darah sistolik dan diastolik diukur sebelum dan sesudah intervensi. Perubahan dalam kelompok dianalisis menggunakan paired t-test, sedangkan perbedaan perubahan antarkelompok dianalisis menggunakan independent t-test, dengan tingkat signifikansi <math>p &lt; 0,05</math>. Skor kepatuhan kelompok intervensi meningkat dari <math>5,21 \pm 1,12</math> menjadi <math>7,43 \pm 0,88</math>, dibandingkan <math>5,18 \pm 1,09</math> menjadi <math>5,67 \pm 1,06</math> pada kontrol, dengan selisih perubahan antarkelompok sebesar 1,73 poin (<math>p &lt; 0,001</math>). Penurunan tekanan darah sistolik lebih besar pada kelompok intervensi dibandingkan kontrol (<math>22,13</math> vs <math>5,13</math> mmHg), dengan selisih perubahan antar kelompok sebesar <math>17,00</math> mmHg (<math>p &lt; 0,001</math>). Penurunan tekanan darah diastolik juga lebih besar pada kelompok intervensi (<math>11,19</math> vs <math>3,45</math> mmHg), dengan selisih perubahan antarkelompok sebesar <math>7,74</math> mmHg (<math>p &lt; 0,001</math>). Keberuan SMART-HTN Nurse Care terletak pada integrasi edukasi tatap muka, dukungan digital, dan monitoring berkelanjutan yang dipimpin perawat. SMART-HTN Nurse Care efektif meningkatkan kepatuhan pengobatan dan menurunkan tekanan darah serta menawarkan model self-management yang aplikatif, berkelanjutan, dan berpotensi direplikasi di layanan kesehatan primer.</p> <p><b>ABSTRACT</b><br/> Hypertension remains a major healthcare challenge, as poor medication adherence contributes to inadequate blood pressure control and an increased risk of cardiovascular complications. Conventional episodic education may be insufficient to sustain</p> |

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*long-term patient self-management. This study aimed to evaluate the effectiveness of SMART-HTN Nurse Care, a hybrid nurse-led self-management intervention integrating face-to-face education, a Digital Pocketbook, and weekly nurse-led monitoring, in improving medication adherence and blood pressure among patients with hypertension. A quasi-experimental pretest-posttest control group design was employed involving 62 patients with hypertension, allocated to intervention (n=31) and control (n=31) groups. The intervention group received SMART-HTN Nurse Care for eight weeks, whereas the control group received routine care. Medication adherence was assessed using the Morisky Medication Adherence Scale-8, while systolic and diastolic blood pressure were measured before and after the intervention. Within-group changes were analyzed using paired t-tests, while between-group differences in change scores were analyzed using independent t-tests, with statistical significance set at  $p < 0.05$ . Medication adherence in the intervention group increased from  $5.21 \pm 1.12$  to  $7.43 \pm 0.88$ , compared with  $5.18 \pm 1.09$  to  $5.67 \pm 1.06$  in the control group, yielding a between-group difference in change of 1.73 points ( $p < 0.001$ ). The reduction in systolic blood pressure was greater in the intervention group than in the control group ( $22.13$  vs  $5.13$  mmHg), with a between-group difference of  $17.00$  mmHg ( $p < 0.001$ ). Diastolic blood pressure also decreased more substantially in the intervention group ( $11.19$  vs  $3.45$  mmHg), with a between-group difference of  $7.74$  mmHg ( $p < 0.001$ ). The novelty of SMART-HTN Nurse Care lies in integrating face-to-face education, digital self-learning support, and continuous nurse-led monitoring. SMART-HTN Nurse Care effectively improved medication adherence and reduced blood pressure, offering an applicable, sustainable, and potentially scalable self-management model for hypertension management in primary healthcare.*

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