

Supplementary File

Standard Operating Procedure (SOP) Checklist for Blood Pressure Measurement

Step	Procedure	Checklist (Yes/No)	Notes
1	Confirm participant eligibility (≥ 5 min rest, no caffeine/smoking/exercise within 30 min)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Verify device: Omron HEM-7203 (validated per AAMI/ESH standards), calibrated and functional	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Select appropriate cuff size based on mid-arm circumference	<input type="checkbox"/> Yes <input type="checkbox"/> No	Small (17–22 cm), Medium (22–32 cm), Large (32–42 cm)
4	Seat participant comfortably with back supported, feet flat on the floor, left arm supported at heart level	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Ensure participant relaxed, no talking, 5 minutes rest before measurement	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Place cuff snugly around upper arm, align with brachial artery	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	Take first BP reading; wait 1 minute	<input type="checkbox"/> Yes <input type="checkbox"/> No	Record value
8	Take second BP reading; wait 1 minute	<input type="checkbox"/> Yes <input type="checkbox"/> No	Record value
9	Average the two readings and record as final BP value	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Document measurement time, device ID, cuff size, and observer initials	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	For follow-up visit, repeat same procedure to ensure consistency	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Supplementary Material – TIDieR Checklist

Item	TIDieR description	Details in this study
1. Brief name	Name of the intervention	Personalized hypertension care approach
2. Why	Rationale, theory, or goal	To improve blood pressure control and quality of life through education, reminders, self-care, and family engagement
3. What (materials)	Materials used	Illustrated educational booklet, pill reminder cards, BP self-monitoring logbook
4. What (procedures)	Procedures, activities	Tailored education, lifestyle counseling, medication reminders, self-monitoring guidance, family involvement
5. Who provided	Intervention deliverers	Community health nurses with ≥ 3 years clinical experience
6. How	Delivery mode	In-person home visits plus follow-up phone calls
7. Where	Setting	Participants' homes in Sempor District, Central Java, Indonesia
8. When & how much	Number, duration, frequency	Four weekly home visits (45–60 minutes each) + 2 phone calls per week (5–10 minutes each) for 1 month
9. Tailoring	Personalization, adaptation	Education and support tailored to literacy level, family context, and daily routines
10. Modifications	Changes during study	No major modifications reported
11. How well (planned)	Fidelity assurance	Nurse training, use of standardized intervention manual, fidelity checklist
12. How well (actual)	Fidelity and adherence	10% of sessions directly observed by supervisors, nurse adherence logs, participant attendance and feedback collected