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Effectiveness of text messaging intervention for blood pressure control and medication adherence among patients with uncontrolled hypertension in India: Design and rationale of the SMS4BP randomized controlled trial

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ABSTRACT

Background: High blood pressure (BP) significantly increases the risk of adverse cardiovascular outcomes. Most adults with hypertension live in South Asia, yet only a small proportion have controlled BP. Patient-focused strategies are needed to improve BP control. Although digital health interventions, such as text messaging show promise, they remain underexplored in India. We aim to evaluate the effectiveness of a text-messaging intervention to reduce BP in patients with uncontrolled hypertension.

Methods: This will be a prospective, randomized open-label trial with blinded endpoint assessment (PROBE) among patients with uncontrolled hypertension recruited from a tertiary-care public hospital setting in India. Eligible participants will be randomized to receive either tailored text messaging intervention or usual care. The intervention will include daily SMS medication reminders delivered in local language for three months, and weekly BP-focused health education message. Participants in the control arm will continue to receive standard hypertension care as advised by their treating physician. All randomized participants will be followed up at three-months for outcome assessment. Primary outcome measures include differences in systolic-BP and medication adherence at three months between intervention and control arm as assessed by mean change from baseline.

Discussion: The novelty of the present study lies in the utilization of text messages as a simple intervention for antihypertensive medication reminders and health education to reduce high BP. This is an innovative approach to engage patients in a country with a high disease burden and significant mHealth potential.

Trial registration: The trial is registered with the Clinical Trial Registry of India with reference number CTRI/2025/04/086053.

1. Background

Cardiovascular diseases (CVDs) account for the largest share of disease burden globally. The estimated number of deaths due to CVDs increased globally from 12.1 million in 1990 to 18.6 million in 2019 [1]. This increase is mainly driven by an enormous disease burden in low- and middle-income countries (LMICs), including India. The largest contributor to the total cardiovascular mortality in India was attributed to ischaemic heart disease (IHD) and stroke (28.1%) [2]. Exacerbating this burden is the rising number of multiple chronic risk factors, including hypertension [3]. Raised blood pressure is the leading CVD risk factor globally and contributed to about 10.8 million deaths in 2021 [1]. It remains the leading risk factor for IHD and stroke, and its suboptimal control represents a significant public health concern.

Today, India alone is home to an estimated 220 million adults with hypertension [4]. Despite available information for effective treatment

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of hypertension, more than half of diagnosed hypertensive patients have uncontrolled blood pressure in LMICs [5,6]. Poor blood pressure control has been primarily attributed to low adherence to antihypertensive medication [7,8]. Although effective medications for blood pressure management are available, long-term adherence to these therapies tends to be low, with the situation being even more challenging in developing countries [9,10]. As a result, there is a need for simple, affordable and acceptable solutions tailored to LMICs to improve medication adherence [11].

In recent years, mobile health (mHealth) interventions have emerged as effective approaches for reaching large populations and facilitating behaviour change [12]. Several systematic reviews and meta-analyses have shown that digital health interventions could be effective in controlling blood pressure, promoting lifestyle changes, and improving medication adherence in LMICs [13–15]. In a meta-analysis of 19 randomized controlled trials (RCTs) (n = 12,418 respondents), digital health intervention significantly reduced systolic blood pressure [mean difference (MD) = −4.43 mmHg (95% CI −6.19 to −2.67)] and improved blood pressure control [odds ratio = 2.20 (95% CI 1.64–2.94)], compared with usual care [14]. Further subgroup analysis revealed that short message service (SMS) interventions had the greatest statistically significant reduction of systolic blood pressure [MD = −5.75 mmHg (95% Cl −7.77 to −3.73)] compared to mobile phone calls [MD = 3.08 mmHg (−6.16 to 12.32),] or smartphone apps interventions [MD = −4.06 mmHg (−6.56 to −1.55)]. Additionally, medication adherence significantly increased in the intervention group than in the control group [MD = 1.59; (95% CI 0.51–2.67)]. Tam et al. [15] in their meta-analysis reported that there was no significant difference in blood pressure reduction between studies that lasted 6 months or less and those that lasted more than 7 months. Moreover, text messages delivered at a lower frequency (once per week or less) had a small effect on systolic blood pressure reduction (effect size 0.35, $P < 0.01$) and diastolic blood pressure reduction (effect size 0.28, $P = 0.01$).

SMS is available in all mobile phone platforms and network providers. In India, there is considerable potential to leverage mHealth as an alternative healthcare delivery channel. Mobile traffic is growing very fast year on year, and it grew sevenfold from 2016 to 2021, globally as well as in India. A recent systematic review from India suggests that mHealth-enabled interventions may improve hypertension management; however, most randomized trials evaluated nurse- or non-physician-led digital clinical decision support systems, with limited studies directly delivering mobile phone-based SMS interventions to patients [16]. A qualitative study nested within the StAR trial (SMS-text Adherence SuppoRt) demonstrated that SMS-based adherence support for hypertension was acceptable and relevant to patients in an LMIC setting [17]. Varlet et al. [18] conducted a randomized study involving 314 patients with hypertension with <6 months of antihypertensive treatment in Chile and found that participants in the SMS-group increased medication adherence from 49% to 62.3% (P = 0.01) at 6 months follow-up.

Several RCTs and meta-analyses of RCTs have identified mHealth intervention including text messages as an effective strategy to improve medication adherence and lower blood pressure [13,14]. However, their effectiveness has not been adequately evaluated in the Indian context. While existing evidence also suggests benefits of mHealth in improving medication adherence among patients with established CVDs [19], RCTs are needed to demonstrate its effectiveness and justify its use in routine clinical care.

1.1. Rationale and hypothesis

LMICs face the highest risk of CVDs and premature mortality owing to high rates of uncontrolled hypertension [20]. In South Asia, 23% of the global 1.13 billion adults with hypertension reside (199 million in India) [21]. Yet, only about 13% have their blood pressure under control [22]. There is a great need for patient-focused strategies to improve blood pressure control. Mobile phones are a promising approach for delivering health interventions [23], and it is found to be acceptable in the Indian context [24]. Previous studies have shown text messaging to be effective in smoking cessation, healthy dietary habits, increased physical activity, and hypertension control [15,25,26]. However, the potential of text messaging for hypertension management remains underexplored in India. In this study, we hypothesize that a tailored text messaging intervention will lead to improved medication adherence and lower blood pressure compared to standard of care among uncontrolled hypertensives. Hence, the study aims to assess the effectiveness of this text messaging intervention for blood pressure reduction and improvement in medication adherence among uncontrolled hypertensive patients at three-month follow-up in a tertiary-care public hospital setting in India.

1.2. Primary objectives

1. To assess the effectiveness of a text messaging intervention in systolic-blood pressure reduction among patients with uncontrolled hypertension in a tertiary care set-up in India.
2. To assess the effectiveness of a text messaging intervention for adherence to antihypertensive medication among patients with uncontrolled hypertension in a tertiary care set-up in India.

1.3. Secondary objectives

1. To measure the proportion of individuals with controlled hypertension defined as systolic blood pressure <140 mmHg and diastolic blood pressure <90 mmHg.
2. To measure the proportion of individuals with at least a 5 mmHg reduction in systolic and diastolic blood pressure.

2. Methods

2.1. Study design

SMS4BP (Effectiveness of Text Messaging Intervention for Blood Pressure Control) is a prospective, randomized open-label trial with blinded endpoint assessment (PROBE). Eligible patients will be randomly allocated to either the intervention arm or the control arm in a 1:1 ratio. The study workflow is depicted in Fig. 1. The protocol is developed and reported in compliance with the Standard Protocol Items: Recommendations for Interventional Trials (SPIRIT) [27]. This study

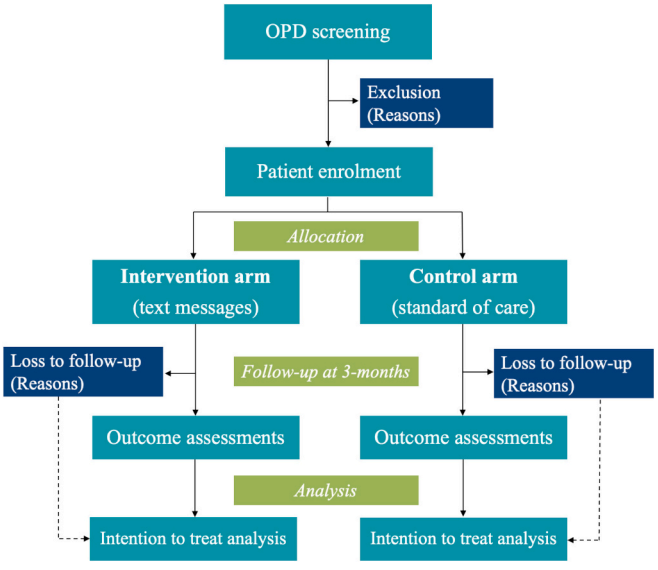

Fig. 1. Trial workflow.

has received ethics approval from the Institutional Ethics Committee, All India Institute of Medical Sciences, New Delhi, India (AIIMSA3723/08.04.2025). Trial protocol amendments and modifications will be communicated for approval to the same ethics committee. The trial is registered, and the protocol can be accessed in the Clinical Trial Registry-India vide registration number CTRI/2025/04/086053.

2.2. Study setting and population

The study will be carried out within a tertiary-care public hospital setting in India. Individuals attending the Neurology and Cardiology outpatient departments (OPDs) at the All India Institute of Medical Sciences, New Delhi, will be screened for eligibility in the SMS4BP study. Participants will be identified based on predefined inclusion and exclusion criteria, ensuring that only those who meet the necessary requirements are selected for participation. In each OPD, blood pressure will be measured, and patients with uncontrolled hypertension, defined as having systolic blood pressure ≥140 mmHg and/or diastolic blood pressure ≥90 mmHg, will be directed to the SMS4BP trial randomization room which is an isolated, quiet room with an optimal temperature. Here, patients will be further assessed for inclusion in the study by obtaining two blood pressure readings taken one minute apart, with the average used to confirm eligibility. Blood pressure measurement will follow standard procedures recommended by international guidelines [28]. Eligible participants will then be enrolled after written informed consent is obtained by research personnel. Blood pressure will be measured using a validated digital device.

2.2.1. Participants' eligibility criteria

Inclusion criteria are: (1) Patients with a clinical diagnosis of hypertension. (2) Patients currently on anti-hypertensive therapy for a period of at least three months. (3) Systolic blood pressure of ≥140 mmHg and/or diastolic blood pressure of ≥90 mmHg at enrolment. (4) Age 18 years and above. (5) Owning a mobile phone with access to a text messaging service. (6) Willing to receive text messages at the specified time from the investigator.

Exclusion criteria are: (1) Patients with severe physical and cognitive impairment. (2) Pregnant and lactating women. (3) Inability to receive text messages due to patients not being able to read in either English or their local language. (4) Frail older adults who are considered incapable of using antihypertensive medications without assistance. (5) Denial of informed consent.

2.3. Randomization

After assessing the inclusion and exclusion criteria, participants who meet the eligibility requirements will be randomly assigned to one of two study groups. They will be allocated in a 1:1 ratio, with one group receiving the intervention (text messages) and the other group serving as the control (not receiving text messages). To ensure a balanced and unbiased randomization process, a computer-based block randomization method will be employed. This method will use blocks of four participants to generate a random allocation sequence. The randomization procedure will be carried out by an independent biostatistician, ensuring the integrity and objectivity of the assignment process. Allocation concealment will be done using serially numbered opaque envelopes. Trial outcome assessors will be blinded to the group allocation.

2.4. Intervention details

The study intervention will involve text messages, including once daily (seven days a week) reminders to take anti-hypertensive medication and weekly tailored health education messages focused on blood pressure control. These text messages were developed based on evidence-based text messaging interventions previously used in mHealth studies. The health education text messages provide information on optimal blood pressure levels, behavioural factors influencing hypertension, risks associated with uncontrolled blood pressure, and importance of blood pressure monitoring and medication adherence. Sample text messages, along with the type of message and frequency, are provided in the Supplementary Appendix. These interventions are an add-on to the standard of care for hypertension management in the form of medication and consultation by the treating physician.

2.4.1. Intervention delivery and frequency

The study will acquire a SIM card (Subscriber Identity Module card) from an Indian Telecom company to deliver the text messages. Scheduled text-messages (in either English or Hindi language) will be delivered daily at a pre-specified time of the day for a period of three-months.

2.4.2. Intervention development and acceptability

The clarity, appropriate tone, perceived usefulness, and significance of each text message were evaluated and rated by investigators prior to the start of the trial. At the trial exit, (1) participants in the intervention arm will be evaluated for their satisfaction with the intervention using a predefined schedule, and (2) participants in the control arm will be provided with hypertension-related health information. The intervention is reported in accordance with the TIDieR (Template for Intervention Description and Replication) structured checklist [29].

2.5. Control arm

Standard of care for hypertension management in the form of medication, physician consultation, and information about hypertension, medication adherence, and blood pressure control at the time of enrolment. Post-trial, all patients in the control arm will be provided with text messages containing health education information on optimal blood pressure levels, behavioural factors influencing hypertension, risks associated with uncontrolled blood pressure, and the importance of BP monitoring and medication adherence (same as the weekly health education provided to patients in the intervention arm).

2.6. Sample size

This study is a non-funded, investigator-initiated randomized controlled trial with a one-year timeline. Therefore, for primary objective 1, the sample size was calculated to detect a clinically meaningful difference in systolic blood pressure that is feasible within available resources. Based on the between-group difference observed in the TEXT4BP feasibility trial (10 mmHg) [30] at three-month follow-up, and assuming a pooled standard deviation of 17.3 mmHg, 47 participants per group are required to achieve 80% power at a two-sided alpha of 0.05. Allowing for 20% attrition, the final sample size is 60 participants per group (total $n = 120$).

For primary objective 2, based on the TEXT4BP feasibility trial [30], the difference in mean Hill-Bone Compliance to High Blood Pressure Therapy Scale score between intervention and control groups at three-month follow-up was approximately 4 points, with a pooled standard deviation of 6 points. Using a two-sided alpha of 0.05 and 80% power, 34 participants per group would be required. Allowing for 20% attrition, the final sample size is 43 participants per group (total $n = 86$). As the study is powered for the primary outcome 1 of systolic blood pressure with a larger required sample size, the final sample size (n = 86) will also be sufficient to detect meaningful differences in medication adherence.

2.7. Baseline and follow-up assessments

At baseline, data on demographic details, self-medical history, family medical history, and lifestyle and behavioural factors will be captured using a structured questionnaire. Blood pressure will be measured, and two readings will be obtained at an interval of 1 min each. The rate of

medication adherence will be assessed using the Hill-Bone Compliance to High Blood Pressure Therapy Scale [31]. Anthropometric measurements, including height and weight (for calculating body mass index), and waist and hip circumference, will be taken according to standard protocol. All randomized participants will be followed up at three-months after randomization. End-point assessment will be done by measuring blood pressure following the specified procedure, as in the baseline, and the Hill-Bone Compliance to High Blood Pressure Therapy Scale [31] will be administered again. End-point assessment will be conducted either in person or remotely via videoconferencing, depending on participant availability and health considerations. A follow-up window of ±10 days around the scheduled three-month assessment will be permitted to maximise participant retention and completion of follow-up. The time points of baseline and follow-up measures are presented in Fig. 2. Patients can continue routine follow-up with their physician in the OPD as and when required for consultation and advice, as suggested and needed. There are no anticipated or potentially expected harms.

2.7.1. Blood pressure measurement

Blood pressure will be measured among all randomized participants using a validated electronic blood pressure measuring device following the 2020 ISH Practice guidelines [28]. Participants will be seated comfortably in a relatively quiet room and asked to rest for at least 5 min. With their back and arm supported and feet flat on the floor and with cuff placed on the arm at the level of the heart, two blood pressure readings at baseline, and three blood pressure readings at follow-up will be recorded at an interval of 1 min each, and the average of the last two readings will be used for analysis.

2.7.2. Medication adherence assessment

The adherence to anti-hypertensive medication in this study will be measured by the following:

1. The Hill-Bone Compliance to High Blood Pressure Therapy Scale [31]: This is a 14-item Hill-Bone Scale developed to assess patient behaviours for three important behavioural domains of high blood pressure treatment – appointment keeping, diet, and medication adherence. This is a useful instrument to measure adherence in patients with hypertension.
2. Pill counting method: This will be calculated as the proportion of days patients took medication as prescribed, divided by the total number of days the medication is expected to be taken (number of days in the assessed time period). Participants will be advised to keep their empty medication strips for pill counting at follow-up.

2.8. Outcome measures

2.8.1. Primary outcome measures

1. Differences in systolic blood pressure at three-month follow-up between the intervention arm and the control arm as assessed by the mean change from baseline.
2. Differences in medication adherence at three-month follow-up between the intervention arm and the control arm as assessed by the mean change from baseline.

2.8.2. Secondary outcome measures

1. Proportion of individuals with at least a 5 mmHg reduction in systolic blood pressure from baseline to follow-up between the intervention arm and the control arm.
2. Proportion of individuals with controlled hypertension defined as blood pressure <140 and < 90 mmHg at three-month follow-up between the intervention arm and the control arm.

	TRIAL PERIOD					
	Enrollment		Post-randomization			Close-out
TIMEPOINTS	$-t_i$ to 0	0	$Month_1$	$Month_2$	$Month_3$	$Month_3$[a]
ENROLLMENT:						
OPD screening	X					
Eligibility screening	X					
Informed consent	X					
Randomization		X				
INTERVENTION/ COMPARATOR:						
Text messages[a]		X →	→	→	→	X
Standard of care		X				
ASSESSMENTS:						
Demographic, medical history, and lifestyle variables		X				
Anthropometric measurements		X				
Blood pressure measurements	X	X				X
Medication adherence		X				X

Fig. 2. Patient timeline: Schedule of enrolment, interventions, and assessments. [a]Arrow indicates daily continuous delivery of intervention.

2.9. Coordination management, monitoring and quality control

Data collected will be entered in the REDCap electronic data capture tool hosted at All India Institute of Medical Sciences, New Delhi. Data-entry, data validation, discrepancy management, medical record coding, anonymization, data extraction, and database locking will be conducted for quality control at regular intervals during the trial. Trial results will be disseminated through publication and will be updated in the trial registry.

2.10. Statistical analyses

Baseline characteristics of participants will be compared between intervention and control arms and summarized as means with standard deviations for continuous variables and frequencies with percentages for categorical variables. All randomized participants will be included in the intention-to-treat (ITT) analysis. Differences between groups will be assessed using the Student's *t*-test or Wilcoxon rank-sum test for normally and non-normally distributed continuous variables, respectively, and the chi-square test or Fisher's exact test for categorical variables.

Primary outcomes will be analyzed according to the ITT principle. Missing outcome data will be handled using appropriate statistical methods. Multivariable regression analysis will be conducted to evaluate the effect of the intervention on blood pressure reduction and medication adherence. For the primary outcomes, linear regression models will be used to estimate the effect of the intervention compared with the control arm on systolic blood pressure and medication adherence. Primary analysis will compare the between-group differences in changes in systolic blood pressure and medication adherence from baseline to three months. Models will adjust for baseline values of the respective outcomes. Variables demonstrating significance in univariable analyses will be included in multivariable models.

Prespecified subgroup analyses will be performed stratified by age, sex, household income, body mass index, duration of hypertension, presence of comorbidities, and class of antihypertensive medications. Statistical significance will be defined as a two-sided p-value <0.05. All analyses will be conducted using STATA software.

3. Discussion

The SMS4BP study is relevant in the light of high cardiovascular disease burden and persistently low hypertension control rates in India, despite the availability of effective and affordable anti-hypertensive medications. Hypertension control remains a cornerstone of cardiovascular disease prevention. Uncontrolled hypertension is also the major contributor to cardiovascular- and cerebrovascular-related mortality [32], underscoring its central role in secondary events. Although substantial progress has been made in understanding hypertension management, important gaps persist in translating evidence-based targets into sustained blood pressure control in routine clinical care. Randomized trials and meta-analyses consistently demonstrate the benefits of achieving blood pressure control below established thresholds in patients with prior cardiovascular disease or stroke [33,34]; however, real-world implementation remains challenging, particularly in resource-constrained settings.

In India, limited opportunities for repeated hypertension counselling hinder long-term medication adherence among patients already engaged in the care pathway. In this context, a low-cost and scalable intervention that reinforces medication adherence and hypertension education directly addresses a critical implementation gap. By focusing on patients with uncontrolled hypertension despite ongoing treatment, the SMS4BP trial targets a high-risk population in whom modest improvements in adherence may lead to meaningful reductions in secondary cardiovascular risk.

The intervention is novel in its use of simple, tailored, local-language text messages that combine daily medication reminders with weekly health education specifically for patients with uncontrolled hypertension attending a tertiary-care public hospital in India. Unlike more complex digital interventions that require smartphones, apps, or intensive health care provider input [16], this SMS-only approach leverages even basic mobile phone access, thereby maximizing patient reach. If effective, the SMS4BP trial has the potential to generate evidence for a scalable intervention to help advance towards hypertension control targets.

CRediT authorship contribution statement

Imnameren Longkumer: Visualization, Validation, Project administration, Methodology, Investigation, Data curation, Conceptualization, Writing – review & editing, Writing – original draft. **Rohit Bhatia:** Validation, Supervision, Resources, Project administration, Methodology, Investigation, Data curation, Conceptualization, Writing – review & editing. **S.V. Subramanian:** Validation, Supervision, Methodology, Conceptualization, Writing – review & editing. **Gautam Sharma:** Resources, Investigation, Writing – review & editing. **Mamta Bhushan Singh:** Resources, Investigation, Writing – review & editing. **Partha Haldar:** Supervision, Resources, Methodology, Writing – review & editing. **Shriya Khanna:** Project administration, Investigation, Data curation, Writing – review & editing. **Shweta Gupta:** Project administration, Investigation, Data curation, Writing – review & editing. **Risha Sarkar:** Project administration, Investigation, Data curation, Writing – review & editing. **V.Y. Vishnu:** Resources, Investigation, Writing – review & editing. **Ayush Agarwal:** Resources, Investigation, Writing – review & editing. **Ambuj Roy:** Resources, Investigation, Writing – review & editing. **Sandeep Seth:** Resources, Investigation, Writing – review & editing.

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Declaration of competing interest

All authors declare no conflict of interests.

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Appendix A. Supplementary data

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Data availability

Not applicable.

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Supplementary Appendix

Title

Effectiveness of Text Messaging Intervention for Blood Pressure Control and Medication Adherence among Patients with Uncontrolled Hypertension in India: Design and Rationale of the SMS4BP Randomized Controlled Trial

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Sample Text Message Library

Type of SMS	Time of receipt by the participant	Text message [English]	Text message [Hindi]
Welcome text (all participants)	Day of randomization	Hello *[Patient Name]*, Welcome and thank you for joining the SMS4BP study at AIIMS New Delhi. We truly appreciate your willingness to participation and contribute to advance medical knowledge and improve health care of others. Please note: This is the ONLY number from which you will receive messages. We will NEVER ask for your personal, financial, or banking information. Best wishes, SMS4BP study team	नमस्ते [रोगी का नाम], हम एम्स नई दिल्ली में एसएमएस4बीपी अध्ययन में शामिल होने के लिए आपका स्वागत करते हैं और धन्यवाद देते हैं। हम इस अध्ययन में आपकी भागीदारी की इच्छा और चिकित्सा ज्ञान को आगे बढ़ाने और अन्य लोगों की स्वास्थ्य देखभाल में सुधार करने में योगदान देने के लिए आपकी तारीफ करते हैं। कृपया ध्यान दें : यह एकमात्र नंबर है जिससे आपको संदेश प्राप्त होंगे। हम कभी भी आपकी व्यक्तिगत, वित्तीय या बैंकिंग जानकारी नहीं मांगेंगे। - एसएमएस4बीपी अध्ययन दल, एम्स (नई दिल्ली) से
Medication reminder text (intervention arm only)	Daily (seven days a week) for 3-months, starting the day after randomization	Reminder: Please take your blood pressure medicine as prescribed today. Daily medicine intake will help control your blood pressure. Wishing you a healthy day! – From SMS4BP study team, AIIMS (New Delhi)	अनुस्मारक : कृपया बताए गए तरीके से अपने रक्तचाप की दवा लें। प्रतिदिन दवा का सेवन आपके रक्तचाप को नियंत्रित करने में मदद करता है। आपका दिन स्वास्थ्यपूर्ण रहे । – एसएमएस4बीपी अध्ययन दल, एम्स (नई दिल्ली) से

Hypertension-related health information text (intervention arm only)	First week after randomization (evening) *This text will be repeated every month for three months	High blood pressure, known as the “Silent Killer,” often has no symptoms but can silently damage your heart, brain and kidney. Keep your blood pressure below 120 and 80 to prevent from any major health problem. Remember to regularly check your blood pressure and take medicine. – From SMS4BP study team, AIIMS (New Delhi)	रक्तचाप, जिसे "साइलेंट किलर" के रूप में जाना जाता है, अक्सर इसके कोई लक्षण नहीं दिखाई देते हैं, हालाँकि यह चुपचाप आपके दिल, मस्तिष्क और गुर्दे को नुकसान पहुंचा सकता है। किसी भी बड़ी स्वास्थ्य समस्या से बचने के लिए अपने ब्लड प्रेशर को 120 और 80 से नीचे रखें। नियमित रूप से अपने ब्लड प्रेशर की जाँच करना और दवा लेना याद रखें। - एसएमएस4बीपी अध्ययन दल, एम्स (नई दिल्ली) से
Hypertension-related health information text (intervention arm only)	Second week after randomization (evening) *This text will be repeated every month for three months	Please remember: Reduce salt and fats in your food and DO NOT smoke and drink alcohol. Engage in exercise at least five times a week, and include stress management and mindfulness practices into your daily routine. – From SMS4BP study team, AIIMS (New Delhi)	कृपया याद रखें: अपने खाने में नमक और तेल आदि की मात्रा कम करें। धूम्रपान और शराब पीने पर प्रतिबन्ध लगाएँ। सप्ताह में कम से कम पाँच बार व्यायाम करें और तनाव प्रबंधन और मन को खुश रखने के अभ्यासों को अपनी दिनचर्या में शामिल करें। - एसएमएस4बीपी अध्ययन दल, एम्स (नई दिल्ली) से
Hypertension-related health information text (intervention arm only)	Third week after randomization (evening) *This text will be repeated every month for three months	Do you know? Irregular intake of blood pressure medication is one the main reason for uncontrolled blood pressure. Please DO NOT stop or change your blood pressure medication unless told by your doctor. – From SMS4BP study team, AIIMS (New Delhi)	क्या आप जानते हैं? अनियंत्रित रक्तचाप का एक मुख्य कारण रक्तचाप की दवा का अनियमित सेवन है। कृपया अपने डॉक्टर द्वारा बताए जाने तक अपनी ब्लड प्रेशर की दवा बंद न करें या न बदलें। - एसएमएस4बीपी अध्ययन दल, एम्स (नई दिल्ली) से

Hypertension-related health information text (intervention arm only)	Fourth week after randomization (evening) *This text will be repeated every month for three months	Good morning! Maintaining simple habits such as not skipping your blood pressure medication, eating a healthy diet, regularly monitoring your blood pressure, staying physically active, and following your doctor's advice is essential for staying healthy and well. – From SMS4BP study team, AIIMS (New Delhi)	नमस्कार! अपने रक्तचाप की दवा को न छोड़ना, स्वस्थ आहार खाना, नियमित रूप से अपने ब्लड प्रेशर की निगरानी करना, शारीरिक रूप से सक्रिय रहना और अपने डॉक्टर की सलाह का पालन करना जैसी सरल आदतों को बनाए रखना स्वस्थ और तंदुरुस्त रहने के लिए आवश्यक है। - एसएमएस4बीपी अध्ययन दल, एम्स (नई दिल्ली) से
End-of-trial text (all participants)	At 3-months after follow-up assessment	Hello *[Patient Name]*, We are grateful for your participation in the SMS4BP study at AIIMS New Delhi. You played an important role in helping us better understand how to improve care for people living with high blood pressure. As you continue your health journey, remember that taking your blood pressure medication daily is essential for long-term control and better overall health. Thank you for being part of this important work! Best wishes, SMS4BP study team	नमस्ते [रोगी का नाम], हम एम्स नई दिल्ली में एसएमएस4बीपी अध्ययन में आपकी भागीदारी के लिए आभारी हैं। आपने हाइ रक्तचाप से पीड़ित लोगों की देखभाल को बेहतर बनाने के तरीके को अच्छे तरीके से समझने में हमारी मदद करने में महत्वपूर्ण भूमिका निभाई। जब आप अपनी स्वास्थ्य यात्रा जारी रखते हैं, याद रखें कि अपने रक्तचाप की दवा को रोजाना लेना दीर्घकालिक नियंत्रण और बेहतर समग्र स्वास्थ्य के लिए आवश्यक है। इस महत्वपूर्ण कार्य में शामिल होने के लिए धन्यवाद! शुभकामनाएँ, एसएमएस4बीपी अध्ययन दल