

ADHERENCE IN HYPERTENSION

PART 1: WORLD ADHERENCE DAY – THE CAMPAIGN

Adherence strategies in arterial hypertension: The ISH call to action

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Poor adherence to antihypertensive therapy remains one of the major barriers to achieving optimal blood pressure (BP) control globally. The ISH and other like-minded medical, scientific and patient societies, launched World Adherence Day in March 2025 to raise awareness, promote effective strategies, and engage multidisciplinary teams in tackling non-adherence as a major global health issue. This initiative, rooted in the ISH Cartagena Declaration,¹⁹ seeks to catalyze a shift from awareness to action – through patient empowerment, digital innovation, and community-based care models. This article reviews the cornerstones of an adherence strategy in hypertension, emphasizing the role of task-shifting, health worker engagement, and digital monitoring to improve health outcomes and reduce cardiovascular risk.

1. Introduction: The Adherence Gap in Hypertension

Hypertension is the leading modifiable risk factor for cardiovascular morbidity and mortality worldwide. Despite the availability of effective and affordable pharmacological treatments, global control rates

remain below 25% – largely due to suboptimal adherence to therapy.^{1,2} Studies show that nearly 50% of patients discontinue antihypertensive medication within one year of initiation, driven by factors such as lack of awareness, side effects, complex regimens, and limited follow-up.^{3,4} In this context, the launch of World Adherence Day represents a milestone. It positions adherence as a critical pillar of global cardiovascular prevention – emphasizing that innovation in drug discovery must be matched by innovation in patient engagement and care delivery models. The initiative recognizes that adherence is not merely a patient behavior but an outcome, influenced by health literacy, social support, and access to consistent care.⁵ The Cartagena Declaration, announced at the ISH 2024 Congress, reaffirmed this vision by calling adherence a global priority to prevent premature cardiovascular deaths.¹⁹

2. The Cartagena Declaration: A Global Call to Action

The ISH Cartagena Declaration,¹⁹ issued during the ISH's 2024 Scientific Meeting in Colombia, recognized the global challenge of improving adherence and transformed it into a unified international agenda and call to action to enhance therapeutic adherence in the treatment of hypertension worldwide. It called for a renewed commitment to strengthen adherence as a central determinant of blood pressure control, declaring March 27th, 2025, as the first World Adherence Day.

The joint launch of World Adherence Day aims to promote a culture of adherence through global advocacy and evidence-based implementation. Our society emphasized adherence as a “fourth cornerstone” of hypertension management – complementing accurate measurement, risk-based stratification, and guideline-directed treatment. The Cartagena Declaration¹⁹ framed this initiative as a unified call to action, urging collaboration between health professionals, researchers, policymakers, and patients to improve adherence at every level of care. By aligning these efforts with Sustainable Development Goal (SDG)^{3,4,5} reducing premature mortality from noncommunicable diseases – the initiative transforms adherence from a clinical challenge into a global health priority.

3. Adherence Strategies: Multi-Dimensional and Patient-Centered

Adherence in hypertension is a complex behavioral and structural phenomenon. Effective strategies operate at multiple levels.

3.1 Patient-Level Interventions

Educational programs that enhance disease understanding and self-efficacy are fundamental. Evidence demonstrates that simplified regimens – such as fixed-dose combinations – significantly increase adherence rates.⁶ Behavioral approaches, including motivational interviewing and feedback-based coaching, foster self-monitoring and accountability. Mobile health technologies, such as SMS reminders and app-based medication trackers, have shown up to 20–25% improvement in adherence.^{7,8}

3.2 Health System-Level Interventions

Health system redesign is essential to sustain adherence. Task-shifting and task-sharing – delegating routine functions from physicians to trained nurses, pharmacists, and community health workers (CHWs) – have demonstrated strong impact on adherence and BP control, especially in low- and middle-income countries.^{9–11} In Brazil, Peru, and Mexico, CHW-led interventions improved adherence and reduced systolic BP by 10–15 mmHg. Supervision and integration of these workers into multidisciplinary teams are key to maintaining quality and consistency of care.

3.3 Community and Policy-Level Interventions

Community engagement and public awareness campaigns can modify social norms around

medication-taking and lifestyle changes. Policies that ensure the availability of low-cost medications, adherence counseling, and continuous care follow-up are essential to sustain these gains.¹² In this sense, World Adherence Day and the ISH Cartagena Declaration together act as catalysts for advocacy – stimulating government accountability and investment in community-based solutions.¹⁹

4. Task-Shifting and the Role of Health Workers

Task-shifting and task-sharing have emerged as pivotal strategies to close the adherence gap in chronic diseases, including hypertension. The delegation of responsibilities from physicians to CHWs enables more frequent contact, improved patient education, and timely detection of non-adherence or side effects. The WHO recognizes this model as a sustainable response to workforce shortages and as a mechanism to extend the reach of primary care.¹³ In Latin America, programs integrating CHWs have reported adherence improvements of 20–30%, with significant gains in BP control and reductions in hospitalizations.^{9,10} In sub-Saharan Africa, CHW-based models reduced healthcare costs by up to 40%, primarily through prevention of avoidable complications and hospital admissions.^{14–16} Training programs for CHWs should emphasize patient communication, home BP monitoring, early detection of treatment side effects, and coordination with physicians for therapy adjustments.

5. Digital Health and Innovation for Adherence

Digital health solutions enhance the reach and precision of adherence interventions. Smartphone applications and wearable devices allow remote BP tracking, medication reminders, and feedback loops between patients and healthcare teams. Artificial intelligence-driven analytics can identify adherence patterns and trigger tailored interventions.^{17,18} Integrating these tools with CHW outreach maximizes impact – combining human empathy with technological precision.

6. Perspectives and Future Directions

The ISH Cartagena Declaration and World Adherence Day together represent a turning point in global hypertension management. For hypertension, adherence must be viewed not only

Table 1. Multilevel Strategies to Improve Adherence in Arterial Hypertension

Level	Strategy	Key Components	Evidence/Impact
Patient	Education & Simplification	Fixed-dose combinations, tailored counseling, reminders	20–30% improvement in adherence ^{6,7}
Health Worker (CHW/Nurse)	Task-shifting and follow-up	Training in communication, BP monitoring, supervision	10–15 mmHg BP reduction; cost savings up to 40% ^{10,14}
System	Integration & Team-based care	Multidisciplinary teams, clinical protocols, performance indicators	Sustained control rates in primary care ¹¹
Technology	Digital Adherence Tools	mHealth apps, wearables, AI-based analytics	Real-time feedback; scalable population impact ^{17,18}
Community/Policy	Awareness & Access	Medication affordability, adherence campaigns, supportive environments	Strengthened public engagement ¹²

as a treatment issue but as an indicator of system performance and patient trust. Strengthening adherence requires a paradigm shift: from acute care to continuous engagement, from physician-centric to team-based care, and from passive monitoring to proactive empowerment. Scaling up CHW-led models, leveraging digital ecosystems, and embedding adherence metrics in national quality frameworks will be essential to sustain progress and realize the vision outlined in Cartagena.

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