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MedEst|2026 | Vol.6: e573 | ISSN: 2789-7567 |RNPS: 2524| LETTER TO THE EDITOR

Arterial hypertension in medical students: a formative blind spot

Hipertensión arterial en estudiantes de medicina: un punto ciego formativo

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Dear Director:

The recent study by Smith-Ordóñez et al., published in this journal, characterized arterial hypertension (HTN) in children and adolescents treated at the "Dr. Mario Muñoz Monroy" Hospital in Colón [(1)]. Its authors pointed out something that motivates this letter: although headache and chest pain were present in most cases, the diagnosis tended to be late, and they attributed that delay, to a large extent, to "an insufficient perception of risk on the part of professionals and families," added to the lack of a standardized practice of blood pressure measurement [(1)]. That phrase deserves to be read twice. If the trained clinical eye underestimates hypertensive risk in the patient in front of it, it is worth asking with the same honesty what happens when that professional in training looks at himself.

The question is not rhetorical. According to the first WHO global report on hypertension, the number of affected individuals doubled between 1990 and 2019, and two comparable gaps persist: almost half are unaware of their condition, and only one in five receives adequate treatment [(2)]. For years it was assumed that these gaps concerned mainly adult populations far from the health system. Recent evidence forces us to revisit that assumption within medical schools themselves. A cross-sectional study conducted in 2025 with first- to third-year medical students in Tarija, Bolivia, found that 35 % presented blood pressure alterations, with higher prevalence among males and, strikingly, in the second year of the program [(3)]. That finding is not isolated: a study with 250 medical students in India, published in 2025, confirmed a notable prevalence of elevated blood pressure in that same group, despite their low theoretical cardiovascular risk [(4)]. These are students who, while acquiring competencies to detect and treat HTN, may go through their training without systematically incorporating surveillance of their own blood pressure.

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This blind spot does not appear by chance. The most recent hypertension guidelines insist that early diagnosis requires a systematic, not opportunistic, practice of measurement [5]. In the Cuban context, there are potentially relevant formative factors, among them academic stress repeatedly documented in students, including in case series of students referred to student counseling units [6]. To that stress is added a sedentary lifestyle that is also not exclusive to other populations; recent Cuban studies in university students describe sedentary behaviors that silently settle in among the demands of academic life, with little time dedicated to bodily movement outside the classroom [7]. In addition, a Cuban study on the Characterization of smoking in students of the University of Medical Sciences of Pinar del Río found that 55,66 % of male participants were active smokers [8].

Stress, sedentary lifestyle, and smoking are, precisely, three of the main modifiable cardiovascular risk factors on which the student himself will learn to intervene in his patients.

This is not a gap exclusive to Cuba or to this degree program. A recent systematic review on self-care education in medical students, which analyzed 147 articles published up to 2023, concluded that these interventions remain poorly recognized, adopted, and integrated into medical curricula internationally, despite evidence of their impact on the well-being and professional identity of the future physician [9]. The review does not speak specifically of blood pressure, but its central finding—that self-care is taught as discourse and not as curricular practice—is exactly the terrain where the problem raised here germinates: it is not enough for the student to know what HTN is; the practice of measuring himself must be part of his training as much as measuring his patient.

That gap has a very concrete translation in Cuban clinical training. Our students rotate through clinics and polyclinics where blood pressure measurement is a daily gesture always directed outward: toward the hypertensive patient, toward the older adult, toward the child with recurrent headache. Rarely is that same gesture directed toward the student's own arm, and even less so systematically and with documentation. The consequence is not only an unmonitored individual risk, but a lost pedagogical opportunity: nothing teaches the importance of blood pressure screening better than having been, oneself, its object.

Faced with this, it is advisable to avoid two easy exits: individual blame, which asks the student to take better care of himself without modifying the academic overload documented by the very studies cited [6], and institutional silence, which assumes that youth equals

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cardiovascular invulnerability, when the Bolivian and Indian evidence shows the opposite even in the first years of the program [3,4]. Between both extremes there is an intermediate path that could be implemented. Conducting periodic and voluntary blood pressure measurement sessions for medical sciences students themselves, coordinated by the Department of Comprehensive General Medicine, with longitudinal recording in their health history and without replacing the care of their family physician. Those students who present elevated readings would be referred to their family physician for follow-up, guaranteeing the confidentiality of their data and respect for their autonomy as patients.

As a physiologist and as a teacher who trains those who will tomorrow measure the blood pressure of others, the author maintains that this letter does not seek to alarm, but to name a gap that the very data of this journal help to make visible. If under-recording of blood pressure in childhood rightly concerns Smith-Ordóñez et al. [1], under-recording of blood pressure in medical undergraduates should concern us with the same intensity, because we are not talking about a population alien to the health system, but about those who in a few years will be that system. Training physicians who prevent hypertension begins, in all likelihood, by measuring their blood pressure first. They are invited to monitor in themselves what they are trained to prevent in others.

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