

May Measurement Month, season 1



High blood pressure is a major risk factor for premature death and disability. The preventive effect of antihypertensive treatment is well documented in numerous placebo-controlled trials and summarised in systematic reviews.¹ High blood pressure is associated with lifestyle, and non-pharmacological treatment and health policy interventions will have effects on the average blood pressure in a population.

Two major obstacles need to be addressed to improve treatment of high blood pressure and eventually prevent cardiovascular diseases. First, detecting hypertension is a health issue worldwide. In low-income countries, access to affordable health care is often insufficient. Even in high-income countries, an unacceptable proportion of adults do not have their blood pressure measured. Second, many people cannot afford the costs of antihypertensive drugs. Other people might be able to afford the drugs but are not well informed about the risks of high blood pressure and the effects of treatment. Additionally, many doctors do not follow guidelines and do not recommend treatment to their patients.

In 2017, the International Society of Hypertension expanded the annual World Hypertension Day on May 17 to a May Measurement Month (MMM). In this issue of *The Lancet Global Health*, Thomas Beaney and colleagues² present results from this very large global initiative which aimed to increase the awareness and treatment of high blood pressure. 100 countries were approached for this low-cost project, and data from 80 countries were included in the analysis. Despite the very large scale of this project (perhaps the largest blood pressure study ever done), it does not have a population-based design, which would by far be more expensive and might not have been possible. Therefore although it is not a population-based study of hypertension prevalence and treatment, some findings are very important.

Organising blood pressure measurements in low-income countries was the biggest challenge: only 1.6% of participants in MMM were from low-income countries, but these individuals had the highest blood pressures. In the future, this population will be particularly important to reach. Additionally, the proportion of participants with treated but uncontrolled hypertension was higher than the proportion of participants with previously unknown hypertension.

Thus, identifying individuals with known hypertension is as important as targeting individuals without known hypertension.

The investigators analysed the clinical significance of taking repeated blood pressure measurements. From an epidemiological point of view, valid and reliable methods are important; however, the blood pressure measured at repeated measurements on one visit might not always be the optimal way to diagnose hypertension. Nevertheless, individuals with high blood pressure (but within a normal range) are at risk of future hypertension and should receive lifestyle counselling and follow-up. Prevention of hypertension with lifestyle modifications has well documented effects.³

The design of the MMM is built on low-cost activities and volunteers. Involving the traditional health-care system would probably increase the number of screened people. In many countries, blood pressure measurements free of charge are becoming increasingly accessible with automatic devices that are available in waiting rooms of primary health-care centres and could be used for this purpose in the MMM project.⁴

High blood pressure is one of the most important causes of premature death and disability worldwide.⁵ Many questions about risk factors, genetic causes, pathophysiology, and treatment of hypertension remain unanswered. Yet an enormous amount of knowledge about high blood pressure is already available. In May, 2018, PubMed gave more than 463 000 hits for the search term "hypertension". Well developed techniques for measuring blood pressure exist, and positive effects of antihypertensive treatment are well documented. The scientific community has spent much of its time in the laboratory and behind computers but very little time in society. MMM is a huge undertaking to put high blood pressure on the agenda in a seemingly very cost-effective way. The researchers behind this project should be thanked and congratulated for this initiative.

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I declare no competing interests.

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