The mean age was 60.7 ± 12 years. In 8 patients previous transcatheter ablation of septal hypertrophy (TASH) had been ineffective. The RF energy was delivered to the most proximal parts of the septum in the immediate vicinity of LVOT. A region of 2 cm was ablated with a therapeutic end point of achieving a gradient of <50 mmHg. In 9 patients, the left ventricular septum was ablated, and in 10 patients, the right ventricular septum was ablated. Follow-up examinations (echocardiography, 6-minute walk test, bicycle ergometry) were performed 3 days and 6 months after ERASH. The procedure resulted in reduction of 62% in resting gradients and 60% in provoked gradients. It was associated with improvement in New York Heart Association (NYHA) class (from 3.0 ± 0.0 to 1.6 ± 0.7) and 6-minute walk test (from 412.9 ± 129 m to 471.2 ± 139 m) all of which were sustained at 6 months. In this series 21% had atrioventricular (AV) block requiring permanent pacemaker implantation and 1 patient had cardiac tamponade. It is possible that conduction system damage could have resulted from deep lesions caused by high RF energy (40–70 W), delivered by irrigated tip ablation catheter particularly when right ventricular side of the septum was ablated. The ERASH is a promising therapy for obstructive HOCM; however, further refinements in procedure are necessary before this procedure can be offered on a larger scale.

4. Use of secondary prevention drugs for cardiovascular disease in the community in high-income, middle-income, and low-income countries (the PURE Study): a prospective epidemiological survey. Yusuf S, Shofi qul Islam SQ, Chow CK, et al, Prospective Urban Rural Epidemiology (PURE) Study Investigators. Lancet 2011;378:1231–43. doi: 10.1016/S0019-4832(12)60034-0

A large burden of cardiovascular disease exists in the low-income and middle-income countries, however the use of proven medications for secondary prevention these countries is unknown. Prospective Urban Rural Epidemiology (PURE) study was designed to study the use of proven effective secondary prevention drugs (antiplatelet drugs, β -blockers, angiotensin-converting-enzyme [ACE] inhibitors or angiotensin-receptor blockers [ARBs] and statins) in individuals with a history of coronary heart disease (CHD) or stroke. Individuals aged 35–70 years from rural and urban communities from countries of varied economies were recruited. Standardised questionnaires were administered by telephonic or personal interview to collect data on presence of cardiovascular disease and use of proven medications for secondary prevention and anti-hypertensive drugs. Totally 153,996 adults from 628 (348 urban and 280 rural) communities in 17 countries with incomes classified as high (three countries), upper middle (seven), lower middle (three), or low (four) were enrolled between January 2003 and December 2009. Around 5650 participants had a self-reported CHD event (median duration 5 years) and 2292 had stroke (median duration 4 years). Use of medications by patients with cardiovascular disease were antiplatelet drugs (25.3%), β -blockers (17.4%), ACE inhibitors or ARBs (19.5%), or statins (14.6%). Use was highest in high-income countries (antiplatelet drugs 62.0%, β -blockers 40.0%, ACE inhibitors or ARBs 49.8%, and statins 66.5%), lowest in low-income countries (8.8%, 9.7%, 5.2%, and 3.3%, respectively), and decreased in line with reduction of country economic status (P trend <0.0001 for every drug type). Fewest patients received no drugs in high-income countries (11.2%), compared with 45.1% in upper middle-income countries, 69.3% in lower middle-income countries, and 80.2% in low-income countries. Drug use was higher in urban than rural areas (antiplatelet drugs 28.7% urban vs 21.3% rural, β -blockers 23.5% vs 15.6%, ACE inhibitors or ARBs 22.8% vs 15.5%, and statins 19.9% vs 11.6%; all $P < 0.0001$), with greatest variation in poorest countries (P interaction <0.0001) for urban vs rural differences by country economic status). Two-third of the under usage of medications was related to the stage of economic development of the country and 1/3rd to individual factors which included younger people, lower level of education, female gender, smokers, non-hypertensive, non-diabetic, and non-obese individuals. Globally there a significant under usage of medications for secondary prophylaxis and this is more striking in low-income countries. Systematic programmes to ensure increased and appropriate use of proven drugs for secondary prevention are needed in most countries.

Perspective

Our knowledge regarding the usage of medications by patients with CAD or strokes is limited to data available from published clinical trials. This paper is unique in illustrating the real life situation prevalent globally where there is a serious under usage of proven medications including inexpensive drugs for secondary prophylaxis for CAD and stroke. This trend is seen more in low and low middle-income countries. The data is robust and clearly shows correlation of usage of medications with economic status of a country. The data strongly argues for a concerted community level approach to address this issue which is the most cost effective strategy to improve cardiovascular outcomes in patients with established cardiovascular disease.

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