- 1. Marchioli R, Finazzi G, Specchia G, et al. Cardiovascular events and intensity of treatment in polycythemia vera. N Engl J Med 2013:368:22-33.
- 2. Berk PD, Goldberg JD, Silverstein MN, et al. Increased incidence of acute leukemia in polycythemia vera associated with chlorambucil therapy. N Engl J Med 1981;304:441-7.
- 3. Spivak JL. Polycythemia vera: myths, mechanisms, and management. Blood 2002;100:4272-90.
- 4. Lamy T, Devillers A, Bernard M, et al. Inapparent polycythemia vera: an unrecognized diagnosis. Am J Med 1997;102:14-20.
- 5. Wells RE Jr, Merrill EW. Influence of flow properties of blood upon viscosity-hematocrit relationships. J Clin Invest 1962;41: 1591-8
- **6.** Pearson TC, Weatherly-Mein G. Vascular occlusive episodes and venous haematocrit in primary proliferative polycythaemia. Lancet 1978;2:1219-22.

- 7. Cassinat B, Laguillier C, Gardin C, et al. Classification of myeloproliferative disorders in the JAK2 era: is there a role for red cell mass? Leukemia 2008;22:452-3.
- **8.** Barbui T, Barosi G, Birgegard G, et al. Philadelphia-negative classical myeloproliferative neoplasms: critical concepts and management recommendations from European LeukemiaNet. J Clin Oncol 2011:29:761-70.
- **9.** Harrison CN, Campbell PJ, Buck G, et al. Hydroxyurea compared with anagrelide in high-risk essential thrombocythemia. N Engl J Med 2005;353:33-45.
- Landolfi R, Marchioli R, Kutti J, et al. Efficacy and safety of low-dose aspirin in polycythemia vera. N Engl J Med 2004;350: 114-24.

DOI: 10.1056/NEJMe1213283

Copyright © 2012 Massachusetts Medical Society.

A Global View of Health — An Unfolding Series

Harvey V. Fineberg, M.D., Ph.D., and David J. Hunter, M.B., B.S., Sc.D., M.P.H.

This issue of the *Journal* includes the first article in a series of review articles on global health. In a journal that proudly bears the name of a U.S. domestic region, this series will show that local health and local health care are linked to sources of ill health elsewhere in the world. Today, not only are health problems global, but lessons, insights, and fresh solutions regarding such problems flow in all directions. The series is built around articles that explain the need for global health, the challenges to achieving it, and the solutions to problems related to it.

The meaning of the term global health has evolved over time.^{2,3} In developing this series, we adopted the concept of global health as "public health for the world." Public health focuses on the health of populations, as distinct from medicine's focus on the health of individuals. In addition to population-level determinants that are central to public health, the health of populations owes much to the effective delivery of clinical care and also depends on how medical activities affect it. Notably, according to our definition of global health, the distinction between domestic health and foreign health is dissolved. The notion of public health for the world condenses the definition offered by the Institute of Medicine's Expert Committee on the U.S. Commitment to Global Health in 2008.4

Global health is the goal of improving health for all people in all nations by promoting wellness and eliminating avoidable diseases, disabilities, and deaths. It can be attained by combining clinical care at the level of the individual person with population-based measures to promote health and prevent disease. This ambitious endeavor calls for an understanding of health determinants, practices, and solutions, as well as basic and applied research concerning risk factors, disease, and disability.

The changing definitions of global health, as well as the transition from previously used terms such as tropical medicine, international health, and geographic medicine, reflect new demographic, economic, and political realities.^{5,6} Older divisions of the world into developed and developing countries, or into north and south, are less salient in the interconnected, globalized world of 2013. During the past 50 years, infant mortality has fallen by more than 60%, total fertility rates have halved, the growth rate of the world population has diminished by half since a peak in the late 1960s, and the average life expectancy worldwide has increased by almost 20 years.⁷ The result of these changes will be an aging world population, which will herald agerelated changes in the burdens of disease. Economic power, including the capacity of countries to fund health systems and disease-prevention activities, is increasing most rapidly in formerly poor countries in East Asia and South Asia and in Latin America. In sub-Saharan Africa, many of the demographic changes are emerging more

gradually, but rates of economic growth in this region are some of the fastest in the world. Challenges to global health are huge, and the disparities between and within countries are vast; however, the connectivity of global trade, travel, and skilled labor and our collective exposure to transnational threats, such as climate change and pandemics, have necessitated a more global approach to improving the health of populations. Diseases of global importance, such as injuries, noncommunicable diseases, and mental health, can be partitioned according to their differential geographic and temporal effects. Assessing these effects requires metrics to measure the global burden of disease. Pandemic diseases, such as HIV/AIDS and influenza, are quintessentially global in character, whereas some problems are best understood in terms of the population at risk, as in the area of maternal and child health. Global forces such as globalization and climate change, as well as personal behavior involving risk factors such as tobacco use, excessive alcohol consumption, and poor diet, affect health in all countries.

Solutions to global health problems depend on new technologies, such as safer, more effective, and more practical vaccines, and on improved capacities and resources, such as workforce and training; they will also depend on better-designed health care systems, systems to promote population health, and improved global governance. Coordinated action across countries will often be needed in response to disasters and violence. For some infectious and parasitic diseases, the ultimate global solution could be disease eradication.

Although the series will not attempt to cover every topic in global health comprehensively, we have invited the authors to summarize key examples of problems and their potential solutions and to present major themes and current priorities in this field. We hope the series will be of keen interest to health professionals at all levels who seek a deeper appreciation of global health, as well as to experienced practitioners of public health for the world.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org,

From the Institute of Medicine, Washington, DC (H.V.F.); and Harvard School of Public Health, Boston (D.J.H.).

- 1. Hopkins DR. Disease eradication. N Engl J Med 2013;368: 54-63.
- 2. Olds GR. Geographic medicine: a new movement within international health. Acad Med 1989;64:190-2.
- **3.** Brown TM, Cueto M, Fee E. The World Health Organization and the transition from "international" to "global" public health. Am J Public Health 2006;96:62-72.
- **4.** Institute of Medicine, Committee on the U.S. Commitment to Global Health. The U.S. commitment to global health: recommendations for the public and private sectors. Washington, DC: National Academies Press, May 2009.
- **5.** Bryant JH, Harrison PF. Global health in transition: a synthesis: perspectives from international organizations. Washington, DC: National Academy Press, 1996.
- 6. International health. Br Med J 1925;2:578-9.
- Department of Economic and Social Affairs. Population Division. World population prospects: the 2010 revision. New York: United Nations, 2011.

DOI: 10.1056/NEJMe1208801 Copyright © 2013 Massachusetts Medical Society

RECEIVE IMMEDIATE NOTIFICATION WHEN AN ARTICLE
IS PUBLISHED ONLINE FIRST

To be notified by e-mail when Journal articles are published Online First, sign up at NEJM.org.