Table 2. Attitudes of Europeans and Americans, According to Their Religiosity, about Forbidding Research Involving Human Embryos, Even if It Means That Possible Treatments Are Not Made Available to Ill People.*

Response	Total	No Religion	Attendance at Religious Services		
			Less Than Once a Year or Never	Monthly or Yearly	Weekly or More
			percent		
Europe					
Do not forbid	50	64	57	47	36
Forbid	39	29	33	41	49
Don't know or refused to answer	12	7	10	12	15
United States					
Do not forbid	60	76	72	61	50
Forbid	31	18	18	33	40
Don't know or refused to answer	9	6	9	7	10

* Data for Europe are from Eurobarometer 2010; data for the United States are from HSPH 2011. Respondents were asked if they totally agree, tend to agree, tend to disagree, or totally disagree with the following statement about stem-cell research ("regenerative medicine" in Europe): "Research involving human embryos should be forbidden, even if this means that possible treatments are not made available to ill people." Data for "do not forbid" include numbers of respondents saying they totally disagree and those saying they tend to disagree. Data for "forbid" respondents saying they totally agree and those saying they tend to agree. For Europe, respondents with "no religion" are defined as those who say they are nonbelievers, agnostics, or atheists. For the United States, respondents with "no religion" are defined as those who say they have no religion when asked, "What is your religion, if any?"

favor increased federal spending on health care (22% vs. 56%) and scientific research (28% vs. 46%) (Pew Research Center 2011).

This analysis suggests that if the leaders of the two political parties focus mostly on responding to their own adherents' views, their differences could affect future federal funding for embryonic stem-cell research, depending on the outcome of the 2012 election. Alternatively, if they focus their policy positions more on the views of the broader U.S. public, future federal research funding is likely to be secure regardless of which party wins the election.

The views expressed in this article are those of the authors and do not necessarily reflect those of the Robert Wood Johnson Foundation.

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GLOBAL HEALTH

War, Drought, Malnutrition, Measles — A Report from Somalia

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Somalia has been in the grips of disaster for two decades. Throughout this past summer, the human catastrophe dramatically worsened. War and drought have driven hundreds of thousands of people from their homes in south and central Somalia, with some families walking for more than a week across the desert in a desperate attempt to seek safety and assistance within Somalia and in neighboring Kenya and Ethiopia.

Between July and mid-October, an estimated 200,000 displaced

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A Severely Malnourished Child Being Examined by an MSF Medical Officer in Dagahaley, Dadaab Refugee Camp, Kenya.

Photo by Brendan Bannon, courtesy of MSF.

people settled in scores of overcrowded camps scattered throughout Somalia's capital, Mogadishu. More than 110,000 people arrived in Dadaab, Kenya, bringing the total number of Somalis who have sought refuge there over the years to 440,000 (see slide show). Because the formal camps were already full, most of the newly arrived were forced to settle in outlying areas with limited access to water, sanitation, food, and shelter. Nearly 100,000 Somalis also fled to Liben, Ethiopia, where conditions are similarly overcrowded and aid organizations are trying to respond to people's basic needs. Many people also remain in inaccessible pockets of south and central Somalia.

A slide show is available at NEJM.org

A variety of political and natural factors are responsible for the current situation. A full-scale war continues, pitting the Transitional Federal Government, the United Nations–backed African Union forces, and Western intelligence agencies against armed opposition groups, most notably the Shabaab militia. Emergency assistance is viewed by all sides as a potential tool to be used in pursuit of their own political, military, or financial goals, and the persistent lack of security hinders an adequate response. Against this backdrop of agendas, severe, prolonged drought has led to crop failures, soaring food prices, and the death of large numbers of cattle, simply pushing many people over the edge.

It is difficult to get an accurate sense of the extent and magnitude of the population's needs. The near-total absence of an effective epidemiologic monitoring system within Somalia limits data on mortality and morbidity. Aid workers — mainly Somalis — cannot conduct proper assessments because of the constant risk of death and abduction. They rarely venture outside the confines of health care structures or compounds, and when they do, it is for short periods under the protection of heavily armed guards. Recently, an initial survey of a camp a few miles outside of Mogadishu had to be conducted from an airplane out of the range of fire from small arms.

What is known from existing medical programs paints a grim picture. Between mid-May and mid-October, teams from Doctors without Borders (Médecins sans Frontières, or MSF) treated more than 20,000 severely malnourished people in Somalia, 18,000 in Ethiopia, and 11,000 in Kenya. Some projects in Mogadishu were seeing rates of severe acute malnutrition of 8 to 9%, and estimates at the Hilaweyn camp in Liben, Ethiopia, were a staggering 20 to 30%. Measles is rampant. An epidemic rages in Mogadishu, and approximately one third of the severely malnourished children admitted to MSF's intensive care units have postmeasles kwashiorkor, an acute form of malnutrition characterized by edema. It is difficult to gain access to areas outside the capital, but aid workers in the town of Marere have already treated more than 70 patients with cholera and 500 with measles.

In the coming months, Somalis will need all the essentials: food, water, shelter, and emergency medical care. Yet it has always been hard to provide assistance in Somalia, where conflict, violence, and lack of access for humanitarian organizations have been the norm since the overthrow of Siad Barre's regime in 1991. Somalia's fierce clan rivalries add another element of insecurity. Simple administrative procedures, such as hiring drivers or nurses or securing land for health care posts, require long, arduous negotiations that delay any response.

Even though security concerns continue to restrict access to the worst-affected areas, a massive mobilization by international, regional, and Somalia-based organizations is already under way. MSF is now providing aid in nine locations in south and central Somalia and has opened four pro-

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grams in Mogadishu, and it is also working in the refugee camps in Kenya and Ethiopia. This assistance includes primary health care, surgery, maternal care, treatment for malnutrition and measles, the provision of drinking water, and the distribution of relief items for the displaced.

A clear medical priority is treating and vaccinating against measles. Measles-vaccine coverage in Somalia is estimated to be only 46%.[1] Since 2009, the World Health Organization (WHO) has recommended mass vaccination campaigns even after an outbreak has begun — a policy shift that was based on data from the Democratic Republic of Congo and elsewhere.[2,3] Vaccination efforts are currently under way but not at the scale needed. By mid-October, MSF had vaccinated nearly 150,000 people, and teams are trying to expand coverage every day through negotiations with parties to the conflict. The WHO and the United Nations Children's Fund (UNICEF) aim to vaccinate 2.5 million children 15 years of age or younger,[4] but until Somalia's various political actors allow vaccination programs to move forward on a much larger scale, measles will continue to take a huge toll.

Responding to malnutrition is also imperative. The ability to treat and prevent malnutrition has been transformed in recent years by strategies relying on ready-to-use therapeutic and supplementary foods. Most children with severe malnutrition can now be treated by caregivers at home, while hospitalization is reserved for those with additional medical complications. Preventive strategies involving ready-to-use supplementary foods have also proven effective.[5] These developments, however, occurred in relatively stable countries such as Niger and Malawi. In Somalia, these strategies will face serious challenges. Nevertheless, a scale-up of treatment centers continues, and general food distributions by the World Food Program and other organizations include supplemental foods specifically designed to meet the nutritional needs of young children. At transit points in Kenya and Ethiopia, children from 6 months to 5 years of age are receiving 2-week supplies of specialized supplementary foods.

Preventive approaches will have even greater importance, because the lack of access to health care and limited medical capacity dramatically reduce the chances for treatment once disease strikes. To prevent malnutrition, MSF is adding ready-to-use therapeutic foods to general food rations provided in Mogadishu. And with respiratory tract infections a major cause of illness, MSF hopes to integrate the pneumococcal vaccine — which is already available in Dadaab — into its response in Somalia. Continued training of lower-level medical personnel to assist with vaccinations or to identify and rapidly treat cases of simple diarrhea and malnutrition also helps to prevent the few medical facilities that exist from being overwhelmed, allowing doctors and nurses to focus on the most severe cases. And with malaria season imminent, aid workers must prepare for this additional health threat.

In Somalia and its neighboring countries, the aid community faces challenges not seen for a generation: huge camps for refugees and internally displaced people, measles epidemics, high rates of malnutrition, and the presence of cholera and other diseases associated with displaced populations. We have developed better means for treating people and preventing illness in emergencies over the past 20 years, but it is more difficult in Somalia than in many other countries to reach the people in need. Moreover, these advances are always at the mercy of politics, and continued fighting as well as the mistrust or misuse of aid will make it difficult to meet even a fraction of the enormous needs.

On my recent trip to the region to help scale up MSF's response, I met many young Somali adults who have known little but a life of war and a future with few prospects. The assistance provided now can help people survive this crisis, but unless the means to penetrate the widening, seemingly intractable political morass are found, Somalis born today may meet a similar fate.

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

From Doctors without Borders/Médecins sans Frontières, Geneva.

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