



## The Public, Political Parties, and Stem-Cell Research

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Until recently, it seemed as if the question of future federal funding for embryonic stem-cell research had been settled. The Obama administration had lifted President George W. Bush's previous

restrictions on funding, and the legality of that decision was upheld by federal courts.<sup>1</sup> But the 2012 presidential election campaign has once again raised uncertainty about such funding. Most of the Republican candidates have taken positions suggesting that, if elected, they would substantially reduce future federal funding for stem-cell research.<sup>2</sup>

In a polling review project supported by the Robert Wood Johnson Foundation, we prepared for the reemergence of this debate by examining overall public opinion on federal funding of stem-

cell research, as well as the views of Republicans and Democrats, who are the principal voters in presidential primaries.

In this analysis we present data from the most recent polling (see Opinion Polls box) in regard to four particular aspects of the debate over embryonic stem-cell research: whether Americans see such research as morally acceptable or unacceptable; whether they favor or oppose such research in general; whether or not they believe such research should be forbidden, even if it means that possible treatments are not made available to ill people; and wheth-

er they favor or oppose federal funding for research that uses newly created stem cells obtained from human embryos.

In addition, since stem-cell research is of global interest, we place American attitudes into a broader context by comparing U.S. attitudes with the views of the public in 33 European countries on the question of whether embryonic stem-cell research should be forbidden in their country.<sup>3</sup> Also, because prior research has shown that religious attitudes — particularly religiosity — affect people's views on this issue,<sup>4</sup> we examine the role of religiosity both in U.S. and European attitudes concerning the issue and in U.S. partisan politics.

A majority of Americans express pro-stem-cell-research views in response to all four of the

questions we considered. About 6 in 10 Americans (62%) believe that medical research involving stem cells obtained from human embryos is morally acceptable, whereas 30% believe it is morally wrong (Gallup 2011). Similarly, 62% favor the conducting of medical research that uses stem cells from human embryos, whereas 31% are opposed (VCU 2010). When asked in the context of stem-cell research whether they agreed or disagreed that “research involving human embryos should be forbidden, even if it means that possible treatments are not made available to ill people,” 60% of Americans said that such research should not be forbidden; 31% thought it should be forbidden (HSPH 2011). A majority (55%) believe the federal government should fund research that would use newly created stem cells obtained from human embryos; 41% believe the federal

government should not fund such research (CNN-ORC 2010). (Additional data can be found in the Supplementary Appendix, available with the full text of this article at NEJM.org.)

However, on every poll measure for which data are available, Republicans are less supportive than Democrats. About half of Republicans favor medical research involving embryonic stem cells (52%) and believe that such research should not be forbidden (51%), as compared with two thirds (67%) of Democrats on each of these measures (VCU 2010; HSPH 2011). On the question of federal funding, a majority (58%) of Republicans expressed opposition, whereas a majority (70%) of Democrats said they were in favor (CNN-ORC 2010).

As compared with the public response in most European countries, a larger proportion of Americans oppose forbidding stem-cell

research (or “regenerative medicine,” as it is called in Europe) involving human embryos (see Table 1). Among the 34 countries we examined, those where the largest proportion of residents say that such research should not be forbidden are Iceland (71%), Norway (69%), Sweden (67%), and Britain (65%). In four countries, the majority of the public believe that such research should be forbidden: Austria (60%), Luxembourg (54%), Greece (54%), and Slovenia (54%). In four other countries (Germany, Slovakia, Latvia, and Turkey) a plurality were of this same opinion (HSPH 2011; Eurobarometer 2010).

In Table 2, we examine the role of religiosity with regard to this issue. In both the United States and Europe as a whole, people with the least religious involvement are less likely than their compatriots to believe that embryonic stem-cell research

#### Opinion Polls on Stem-Cell Research

CNN–Opinion Research Corporation poll (CNN–ORC)

September 1–2, 2010 (<http://i2.cdn.turner.com/cnn/2010/images/09/09/rel12g.pdf>)

Edison Media Research national election day exit poll (Edison)

November 2, 2010 (<http://www.cnn.com/ELECTION/2010/results/polls/#val=USH00p2>)

Eurobarometer poll

January 29–February 17, 2010 (<http://zacat.gesis.org/webview/index.jsp>)

Gallup poll

May 5–8, 2011 (<http://www.gallup.com/poll/147842/Doctor-Assisted-Suicide-Moral-Issue-Dividing-Americans.aspx>)

Harvard School of Public Health poll (HSPH)

June 29–July 10, 2011 ([http://www.hsph.harvard.edu/research/horp/files/hsph\\_stem\\_cell\\_topline.pdf](http://www.hsph.harvard.edu/research/horp/files/hsph_stem_cell_topline.pdf))

Pew Research Center for the People and the Press polls

June 8–28, 2010 (iPOLL Databank, Roper Center for Public Opinion Research, University of Connecticut, [http://www.ropercenter.uconn.edu/data\\_access/ipoll/ipoll.html](http://www.ropercenter.uconn.edu/data_access/ipoll/ipoll.html))

February 2–7, 2011 (<http://people-press.org/2011/02/10/section-3-the-deficit-and-government-spending>)

Virginia Commonwealth University Life Sciences Center for Public Policy poll (VCU)

May 12–18, 2010 (<http://www.vcu.edu/lifesci/images2/survey2010.pdf>)

Washington Post–Kaiser Family Foundation–Harvard University poll

September 22–October 3, 2010 (<http://www.kff.org/kaiserpolls/upload/8112.pdf>)

**Table 1. European and American Attitudes about Forbidding Research Involving Human Embryos, Even if It Means That Possible Treatments Are Not Made Available to Ill People.\***

Country	Do Not Forbid	Forbid <i>percent</i>	Don't Know or Refused to Answer
Iceland	71	25	5
Norway	69	25	6
Sweden	67	28	6
Britain	65	27	8
Netherlands	63	34	4
Belgium	62	33	5
Czech Republic	62	31	7
United States	60	31	9
Denmark	58	39	4
Finland	58	34	8
France	58	32	9
Spain	58	32	10
Northern Ireland	53	32	15
Hungary	51	42	7
Italy	50	38	12
Switzerland	49	41	10
Lithuania	49	32	19
Ireland	46	33	21
Germany	45	49	7
Estonia	45	33	22
Latvia	44	45	11
Poland	44	42	14
Slovakia	43	49	7
Croatia	43	42	15
Portugal	42	40	18
Slovenia	41	54	5
Cyprus (Republic)	41	41	18
Malta	41	37	22
Greece	39	54	7
Bulgaria	39	34	27
Luxembourg	38	54	8
Turkey	38	42	20
Romania	38	36	26
Austria	33	60	7

\* 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" include numbers of respondents saying they totally agree and those saying they tend to agree.

should be forbidden. Those who are more involved religiously are more likely to support restrictions. In the United States, the proportion of people who believe such research should be forbidden rises from 18% among those who say they have "no religion" or attend religious services less than once a year or never to 40% among those who say they attend religious services weekly or more frequently (HSPH 2011; Eurobarometer 2010). This finding is important for the United States because Republicans (range, 44 to 47%) are more likely than Democrats (range, 32 to 36%) to say they attend religious services at least weekly (Pew Research Center 2010; HSPH 2011). In addition, those who attend religious services regularly are more likely to vote for Republican candidates than for Democratic candidates. For instance, in the 2010 congressional elections, 58% of Americans who said they attended religious services at least weekly voted for Republican candidates, whereas 40% voted for Democratic candidates (Edison 2010).

The difference between party adherents on the issue of federal funding is reinforced by different attitudes toward federal spending more generally. Asked to choose between two options, 71% of Republicans prefer the federal government to cost less in taxes but provide fewer services, whereas 70% of Democrats prefer the federal government to provide more services even if it costs more in taxes (Washington Post-Kaiser-Harvard 2010). Republicans are more likely than Democrats to favor decreased federal spending on health care (47% vs. 8%) and scientific research (30% vs. 13%) and less likely than Democrats to

**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
<i>percent</i>					
<b>Europe</b>					
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
<b>United States</b>					
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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1. Cohen IG, Adashi EY. Human embryonic stem-cell research under siege — battle won but not the war. *N Engl J Med* 2011;364(22):e48. (Available at NEJM.org.)

2. Jan T. Most in GOP field would scale back stem cell funding. *Boston Globe*. August 7, 2011 ([http://articles.boston.com/2011-08-07/news/29862080\\_1\\_cell-lines-cell-funding-cell-research](http://articles.boston.com/2011-08-07/news/29862080_1_cell-lines-cell-funding-cell-research)).

3. Eurobarometer 73.1: biotechnology. Brussels: The European Commission, 2010 ([http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_341\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_341_en.pdf)).

4. Nisbet MC. The competition for world-views: values, information, and public support for stem cell research. *Int J Public Opin Res* 2005;17:90-112.

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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 des-

perate attempt to seek safety and assistance within Somalia and in neighboring Kenya and Ethiopia.

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