US scientists fear new restrictions on fetal-tissue research

House Republicans conclude that tissue from aborted fetuses is of limited value for research and seek to reduce funding.

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04 January 2017

The US government should restrict or eliminate support for research that uses human fetal tissue obtained from abortions because it is of little use to medicine, a special panel of the US House of Representatives said on 3 January.

The panel said that the US National Institutes of Health (NIH) should develop a system to determine whether fetal tissue is “the most appropriate model” for projects seeking government funding. It also urged Congress to commission studies on the feasibility of using tissue from stillborn and preterm infants instead. If that proves viable, the group said, the government should stop funding experiments with tissue from aborted fetuses — even though dozens of universities and scientific societies say such research is vital to the development of therapies.

The recommendations released by the panel’s Republican majority come after an extensive probe of the practice of distributing human fetal tissue for research. Scientists reacted strongly to the report. “Fetal-tissue research is scientifically important and it should continue to be pursued,” says Larry Goldstein, a neuroscientist at the University of California, San Diego. “This report is wrong and wrongheaded. It’s driven by ideology, not science.”

The House Energy and Commerce Committee created the special panel in 2015, after undercover videos surfaced showing abortion providers and companies that distribute fetal tissue discussing how they gather the tissue, and collect payments for it. The videos caused an outcry — particularly among Republicans opposed to abortion — and prompted a series of congressional hearings and investigations.

In the aftermath, scientists who work with human fetal tissue worried that they would be targeted by anti-abortion groups, and that research with the tissue could be restricted. In a March 2016 statement signed by 62 institutions and scientific organizations, the Association of American Medical Colleges argued that such research is vital for the development of therapies to treat Parkinson’s disease and Ebola, and has been crucial in the development of many vaccines.

Democrats on the investigative panel produced a report in December largely echoing these sentiments. But the Republican majority determined that such statements were “misleading and false”. “The alarmist claims that restrictions on human fetal tissue research would somehow delay or prevent the development of cures are entirely unfounded,” the Republicans wrote.

Significant figures

They also argued that human fetal tissue is not as important in the development of vaccines as proponents of the research have made it out to be. "This to me is very, very worrisome," says Alta Charo, who studies law and ethics at the University of Wisconsin–Madison. "They are not only reimagining history but reimagining a future in which all the materials we currently think we need, we don’t actually need."

Much of the House Republicans’ argument is predicated on the relative rarity of such research: their investigators found that only 329 NIH grants awarded between 2010 and 2014 involved fetal-tissue research, about 0.2% of NIH grants during that time. Few clinical trials use fetal tissue, and the investigators concluded that published research using fetal tissue garners few citations.

But this ignores how science works, counters Goldstein. “Something that’s scientifically important is not necessarily pursued by a lot of people,” he says. “It’s not a popularity contest.”

Fetal tissue is often an integral part of an experimental protocol without being the focus of the experiment itself, he adds, and that may not be apparent in a grant application. A paucity of publications may also reflect the scarcity of fetal tissue. “Of course there are not many publications, because there’s not much of a supply of material — and that’s fine,” he says. “It’s used carefully.”

Limited supplies

Difficulty acquiring such tissue is one reason that physiologist Alan Fine shifted his research programme at Dalhousie University in Halifax, Canada, away from using fetal-tissue transplants to treat neurological diseases. He thinks that such research should continue, but says its benefits are sometimes exaggerated.

“The idea that fetal tissue represents an essential and gold-standard research material for work in many fields — those claims are a bit of a stretch,” says Fine. “But people do need to be mindful there may be cases where it is uniquely valuable to work with primary human fetal tissue.”

David Prentice, vice-president and research director of the anti-abortion, non-profit Charlotte Lozier Institute in Washington DC, says that such claims are clouded by researchers’ self-interest. “Like anybody, scientists don’t like to be told they can’t do certain things,” he says. “I would say there are probably better and newer alternatives to any type of fresh fetal tissue.”

It is unclear how president-elect Donald Trump will view the matter, but Prentice is optimistic that the investigation’s recommendations will be influential in the newly elected Congress. "They will have a Republican majority in both the House and the Senate,” he says. “I think there is still some will to move ahead with some of these recommendations.”

Nature | doi:10.1038/nature.2017.21254