Many British women struggle to get abortions, even though they're legal

21st September 2017 by Katherine Lindemann

Women in Great Britain are looking for alternatives outside the healthcare system.

Abortion is legal in Great Britain—and covered by the NHS—but many British women still struggle to get one when they need to. So if the procedure is legal, and cost isn't an issue, what's standing in the way? A new study, which analyzes correspondence with a women's health non-profit, identifies a number of barriers, ranging from logistics to social stigma.

Women on Web is an international non-profit that provides abortion medications by mail and online medical consultations in areas where abortion is illegal. While the service is not available in Britain, the organization receives hundreds of messages a year from British women seeking illegal home medical abortions. Public policy researcher Abigail Aiken and her coauthors analyzed their requests to find out what's keeping traditional abortions out of some women's reach.

Getting through the clinic door – Nearly half of the women seeking home abortions through Women on Web reported that simply getting to a clinic can be too hard. For some, it was impossible to discretely take time off work or find alternate childcare arrangements. For others, it was a matter of distance. "My nearest clinic is over 100 miles away," one woman explained. "I do not drive, and cannot afford the public transport to attend the three to four appointments that they require to complete the abortion," reported another.

Weeks of waiting – Wait times for appointments at medical abortion providers in Britain can be several weeks. "I cannot wait that long," said a 34-year-old woman living in England. "Every day is feeling like torture." In some cases, these delays push women over the threshold for a standard medication abortion. One woman who was over seven weeks pregnant was told she could not be seen for three weeks. Medication abortions after nine weeks require additional doses of medication, meaning more clinic visits and an increased likelihood of hospitalization. Sometimes they also require a surgical procedure to complete the abortion. Fearing the trauma and discomfort of surgery and hospitalization, the woman sought to end her pregnancy herself at home before reaching the nine-week mark.

NHS covers most women, but not all – Women who aren't residents of the UK are not covered by the NHS for non-emergency care. For them, abortions in Britain come with a hefty and often prohibitive price tag—upwards of £545.

Judgemental providers – "I've had bad experiences in the past," one woman told the Women on Web. "I've had an abortion before, and I know I will be judged for having another one," said another.

Word travels fast – It's not only the judgement of clinic staff that women fear. About a third of the women expressed privacy and confidentiality concerns. Some worked in hospitals or clinics themselves and didn't want their co-workers to find out about their abortions. Others had family and friends who worked at the local hospital. In many parts of Britain, NHS patients can't choose local service providers, meaning these women have no way to protect their privacy. Other women worried that if they were seen going to an appointment, word would spread through their communities, and they would be judged.

Controlling partners or families – One in six women who wrote to Women on Web said they couldn't seek abortions in clinics or hospitals because of controlling partners or family members. Concerns ranged from fear of disapproval on religious grounds to domestic violence and honor killings. "I'm in a controlling relationship, he watches my every move, I'm so scared he will find out… he wouldn't let me go ahead," one women wrote. "I do not want to defy certain family members," said another. "That would put my life at risk."

For some of the women, seeking a home abortion was a matter of comfort or preference. But as Aiken and her co-authors discovered, many others found themselves unable to access Britain's legal abortion services. "This research shows that some groups of women in Britain find it very challenging or even impossible to access abortion care through current service models," Aiken said. "Making health care services available does not automatically make them accessible or acceptable."

Many of the barriers the researchers uncovered would be removed if women could administer medication abortions in their own homes under the guidance of medical professionals online. In other countries, this approach has been found to safely increase women's access to abortion. Currently, it is against the law in Britain for women to cause their own abortions, meaning that for now, the option remains closed to them.

Featured image courtesy of Amanda Graham.

Zika virus could be used to treat brain cancer, new study suggests

5th September 2017 by Katherine Lindemann

The same mechanism that damages developing brains allows Zika virus to target cancer stem cells.

It's well known that Zika virus is dangerous for developing brains, but new research suggests it could actually benefit adult patients with brain cancer. Glioblastoma, the most common type of brain cancer, is usually lethal, as surgically removed tumors typically regrow in a few months. The growth of glioblastoma tumors is driven by stem cells, similar to the growth of healthy tissue in a developing brain. In a new study, researchers injected Zika virus into the brain tumors of mice to test its effectiveness as a potential cancer treatment. The initial results are promising, with treated mice living two to three times longer than those that weren't injected with the virus. One of the study's authors, Milan Chheda of the Washington University School of Medicine, tells us more.

ResearchGate: What is glioblastoma?

Milan Chheda: Glioblastoma is an aggressive brain tumor. It originates in the brain, and does not usually metastasize outside of the central nervous system. It kills most people in less than two years of diagnosis despite maximal therapy with surgery, radiation, and chemotherapy.

RG: What challenge in treating this type of cancer does your research address?

Chheda: Despite the most aggressive treatments possible, the tumor inevitably returns. Glioblastoma stem cells are resistant to radiation and chemotherapy. A longstanding challenge has been how to specifically kill these otherwise resistant cells. No current therapy specifically eradicates these cells.

RG: What made you think the Zika virus might help with this?

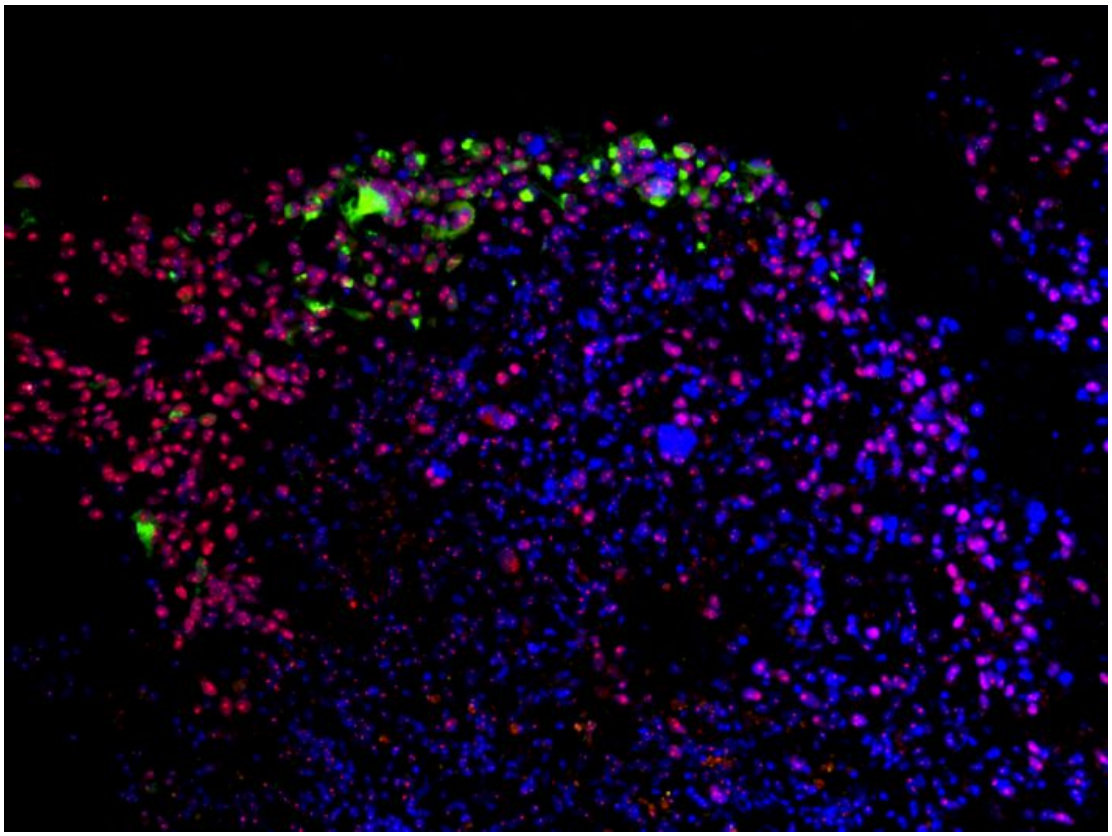
Chheda: Brain tumor stem cells activate many pathways similar to early stage neuroprogenitors. Normally, Zika virus has a tropism for neuroprogenitor stem cells in the developing fetus. Zhe Zhu, a postdoctoral fellow in Jeremy Rich's laboratory, reasoned that since Zika can target these neuroprogenitor cells, it might also target cancer stem cells, which share similarities to these cells.

RG: How did you test this in mice?

Chheda: We implanted highly aggressive mouse glioma cells in mouse brains. After brain tumors formed, we treated the mice by directly injecting mouse-adapted Zika virus into the tumor.

RG: What were the results?

Chheda: Mice treated with Zika virus lived significantly longer. In one mouse model, mice lived two times longer after treatment compared to mice treated with saline control. In another mouse model, mice lived three times longer after treatment compared to controls. When we inspected mouse brains, we found that the virus did not spread outside of the tumor.



Zika virus (green) preferentially targets the stem cells (red) in a human glioblastoma. Credit: Zhu et al., 2017

RG: How likely is it that this success would translate to humans?

Chheda: We have guarded optimism. But we need to further test safety and we need to prove this works in human glioblastomas when transplanted into mice.

RG: Were there negative effects? What are the dangers?

Chheda: We did not see negative effects of the virus in the mice. Potential dangers are that the virus could injure normal brain or spread. We are currently testing attenuated virus in mice. However, Zika virus does not typically cause significant problems in adults.

RG: What are the next steps for this research? Could a human trial be on the horizon?

Chheda: We are focused on developing and testing safer versions of the virus, and testing the therapy in mice carrying human tumors. After this, yes, we envision tests in humans, and eventually adding this to existing conventional therapy (surgery, radiation, and chemotherapy) to kill the otherwise resistant stem cell component of the tumor.

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Bio
Dr. Milan G. Chheda is an assistant professor of medicine at the Oncology Division of the Washington University School of Medicine in St. Louis. His research investigates epigenetics, cancer genomics, cancer stem cells, and glioma.

Vaccines in poor countries have saved 20 million lives and 350 billion dollars since 2001

4th September 2017 by Maarten Rikken

And that's just direct costs. The estimated overall economic impact of vaccines is $820 billion.

From 2001 to 2020, vaccinations in the world's poorest countries will have prevented 20 million deaths and saved $350 billion in healthcare costs, researchers project. The broader economic value from lives saved by vaccinations is estimated to be $820 billion. Researchers studied the impact of the Global Vaccine Alliance (Gavi) which was launched in 2000 to provide vaccines to children in the world's poorest countries. Gavi has helped bring immunization to 580 million children, primarily in the 73 countries covered in the study's analysis.

We spoke to Sachiko Ozawa, Ph.D., an associate professor at the UNC Eshelman School of Pharmacy, about the study, which was published in the Bulletin of the World Health Organization.

ResearchGate: What motivated you to study the value of vaccinations?

Sachiko Ozawa: Childhood immunization is one of the best development investments for humanity. But it is hard to appreciate the benefits of preventative measures like vaccination because it means that people did not become sick and are not visible to the community. Estimating the value of vaccinations is important in illustrating the health benefits and significant economic impact vaccinations are having around the world and encourage donors to continue investing in such a cost-effective measure.

RG: What did you find?

Ozawa: Vaccination efforts made in the world's poorest countries since 2001 will have prevented 20 million deaths and saved $350 billion in costs related to illness by 2020. Immunization also brings benefits to society from the intrinsic value that people place on living longer and healthier lives. This intrinsic value of vaccination is estimated at $820 billion from vaccination against 10 diseases delivered in 73 low- and middle-income countries over 20 years.

RG: How do vaccines save money and lives?

Ozawa: Vaccination prevents illnesses, hospitalizations, disabilities, and deaths. Specifically, we estimated that 10 vaccines supported by Gavi, the Vaccine Alliance, in low- and middle-income countries will have prevented an estimated 500 million cases of illness, 70 million hospitalizations, 9 million cases of long-term disability and 20 million deaths by 2020. This translates to cost savings from averted treatment, health care related transportation costs, productivity losses to caregivers and productivity losses due to disability and death, estimated at $350 billion from immunizations in poor countries over two decades. We estimate the broader economic and social value of saving these lives and preventing disabilities at $820 billion.

RG: Can you take us though how you arrived at your figures?

Ozawa: Estimating the impact of vaccination at a large scale – across many countries, vaccines, and years – takes collaboration. This work was carried out in collaboration with disease modeling experts convened by Gavi and the Bill and Melinda Gates Foundation to estimate the global impact of immunization. Estimates of illnesses and deaths averted by vaccination come from disease-specific models based on the latest forecasts of vaccine demand and estimates of disease burden.

We used two methods to estimate the economic value. The first, called the cost of illness method, tallied the costs that could be saved by preventing illness. This included inpatient and outpatient

treatment costs, costs to travel to health facilities, lost wages of caregivers to care for ill children, and the economic contributions the disabled and deceased children could have made to society had they been healthy. We also used a second method, called the full income approach, which captures the intrinsic value that people place on living longer and healthier lives, drawing on studies that probe the value that people place on this.

RG: Which vaccinations did you look at? Are there any infection specific vaccines that are comparatively more valuable than others?

Ozawa: We examined the impact of vaccination against 10 vaccine-preventable diseases: hepatitis B, human papillomavirus, Japanese encephalitis, measles, rotavirus, rubella, yellow fever and three strains of bacteria that cause pneumonia and meningitis (haemophilus influenzae type b, streptococcus pneumoniae, and *Neisseria meningitidis* serogroup A). We found that vaccination against hepatitis B, measles, and haemophilus influenzae type b and streptococcus pneumoniae provided the greatest economic benefits due to the large disease burden prevented.

RG: How close are we to achieving total vaccination coverage in low- and middle-income countries?

Ozawa: While significant progress has been made in improving access to life-saving vaccines, 19.5 million children still do not have access to a full course of the most basic vaccines according to the latest estimates of national immunization coverage from UNICEF and the World Health Organization. The children who miss out on these vaccines in low- and middle-income countries are often those in the poorest households, in remote locations and whose mothers have a low level of education.

Greater efforts by governments, development partners, and civil society are needed to support immunization and enable people to stay healthy and contribute to social and economic development. For example, the health and economic gains cannot be achieved without countries meeting the projected funding requirements for immunization programs, including the costs of vaccines, supply chain and service delivery. We estimate a funding gap of $6.9 billion over 2016-2020 to deliver vaccination programs across the same 73 countries.

RG: Do you think the return on vaccinations is similar in high-income countries?

Ozawa: Because vaccines were introduced in high-income countries decades ago, it is much harder to understand what the disease burden would have been without vaccinations. Many things besides vaccination have also changed over the years. But if we take the disease burden experienced before

vaccine introduction in high-income countries and apply them today, we would see that vaccinations are making a significant health and economic impact in preventing illnesses, disabilities and deaths.

When vaccination rates drop in high-income countries we see disease outbreaks. This proves that we are preventing illnesses, deaths, and health care costs from vaccinations in high-income countries. While vaccination rates for child immunizations are high, many adults remain unvaccinated. For example, we estimated the annual economic burden of adult vaccine-preventable diseases in the US at $9 billion. Regardless of country, vaccination is important for people to reach their full potential as active and productive members of society.

RG: How is the different from your earlier findings?

Ozawa: These results support our earlier findings on the return on investment of childhood immunizations across low- and middle-income countries, where we found a $16 to $44 return for every dollar invested in immunization over the decade based on the same two methods used to estimate the economic value. Immunizations are an excellent investment. But to make the estimated return a reality, people must continue to demand vaccines, and country governments and donors must honor commitments to mobilize resources to support and strengthen immunization programs.

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Bio

Sachiko Ozawa, Ph.D., M.H.S., is a health economist whose work focuses on generating evidence that can be used to improve the health of populations globally. Her research focuses on examining the value of vaccines, assessing the economic burden of diseases and examining the demand and utilization of health care.

View profile

Featured image courtesy of UNICEF Ethiopia.