

Should Canada focus on antimicrobial resistance?

■ Cite as: *CMAJ* 2017 January 16;189:E82-3. doi: 10.1503/cmaj.109-5362

The Canadian Institutes for Health Research's new global health research guru wants Ottawa to put antimicrobial resistance on its list of foreign-aid research priorities.

Speaking in Vancouver on Nov. 15 at Health Systems Research 2016, a biennial conference that attracted 2000 delegates from 101 countries, Steven Hoffman, scientific director of CIHR's Institute of Population and Public Health, said controlling antimicrobial resistance internationally is a "marquee issue" Canadian researchers should champion.

Hoffman's suggestion came during a foreign-aid strategy session chaired by Karina Gould, the federal government's Parliamentary Secretary for International Development. Gould said the government aims to empower women and girls within a "feminist approach" to foreign aid, an approach that may result in a departure from the previous government's exclusion of many reproductive health services from Canadian aid programs.

Others concurred with Gould. Michael Clarke, cochair of the Policy and Advocacy Committee of the Canadian Coalition for Global Health Research said Canada should pay far greater attention to women's reproductive health, while Susan Johnson, senior vice president of the Canadian Red Cross, urged Ottawa to "address the needs of women and children living in fragile contexts."

Ultimately, the federal government will decide on the Canadian focus.

The conference was largely devoted to promoting more "resilient" health systems in light of the Ebola crisis while promoting universal health coverage in countries where billions of people have little access to health care.

However, at least a dozen researchers and policy makers from Africa, Asia, the

Americas, Europe and the World Health Organization (WHO) called, like Hoffman, for action on antimicrobial resistance.

In a [recent article](#) in the *International Journal of Infectious Disease*, Hoffman and others called for a global antibiotic conservation fund for low- and middle-income countries.

Antimicrobial resistance, says Hoffman, is a rare issue where Ottawa has levers. "The federal government leads domestic efforts on controlling" it, noted Hoffman. "Thanks to this we could make a difference" internationally.

Qiang Sun of Shandong University in China presented results of a survey of antibiotic use by 200 health providers and 1000 citizens in three rural Chinese provinces with a total population of 100 million. Qiang and his coauthors found that 42% of residents carried highly resistant bacteria,

and 78% misused antibiotics to treat colds. The survey is not yet published.

"Antibiotic resistance is very severe," Qiang warned in a session on antibiotic use.

Studies presented from Bangladesh, India, Sweden, the United Kingdom and Zambia, as well as from the WHO, reinforced the message that better antibiotic stewardship is urgently needed in developed and developing nations.

However, some Canadian global health research specialists warn that attention to health systems research must not be diminished if Ottawa takes Hoffman's advice.

If controlling antimicrobial resistance is adopted as a key research issue, it should be coupled with attention to "upstream issues that have created the [antimicrobial resistance] crisis, namely, the existing global inequities of the social determi-



Better antibiotic stewardship is urgently needed in developed and developing nations.

nants of health,” said Janet Hatcher Roberts, codirector of the WHO Collaborating Center for Knowledge Translation and Health Technology Assessment in Health Equity at the University of Ottawa.

Others were even more guarded about Hoffman’s suggestion. “I fully believe that [antimicrobial resistance] is a worthy topic of great effort and concern, but I personally don’t see it as something that Canada should focus on to the exclusion

of many other areas where Canada has greater strengths,” said David Zakus, professor of distinction in global health at Ryerson University in Toronto. “The former government’s focus on maternal and child health was widely applauded by just about everyone and should continue to be an emphasis.”

Hoffman’s enthusiasm for antimicrobial resistance as a global health priority was echoed by CIHR’s President Dr. Alain Beau-

det in [an interview](#) posted online during the conference. Beaudet also [endorsed e-health](#) and artificial intelligence as foci for global health researchers.

At the close of the conference, Beaudet said he supports a broad suite of research topics more conventionally associated with efforts to reduce preventable deaths in poor countries.

Paul Webster, Vancouver, BC