

Keeping up with the neighbors speeds vaccine use

March 15 2010

Researchers at the Johns Hopkins Bloomberg School of Public Health conducted an analysis of worldwide use of Haemophilus influenza Type b vaccine (Hib) to determine what factors influenced a nation's adoption of the vaccine. The study found that a nation's eligibility for support from the Global Alliance for Vaccine and Immunization (GAVI) and whether a country's neighbors used the vaccine were major influencing factors in addition to price of the vaccine. The findings appear in the March 16 edition of *PLoS Medicine*.

"This study is the first to measure how countries' decisions to adopt new vaccines are highly influenced by their neighbors' decisions," said the study's lead author, Jessica Shearer, MHS, a former research associate at the Bloomberg School of Public Health.

"Countries seem to be engaging in an arms race to vaccinate -- decisions which will save millions of lives."

For the study, the researcher analyzed data on Hib use from 147 countries from 1990 to 2007. Models were developed to account for a nation's income and burden of Hib disease. According to the study, the receipt of GAVI support sped up the time on decisions to use Hib by 63 percent. The presence of two or more neighboring countries using Hib accelerated adoption by 50 percent. An increase in price negatively affected the time it took a country to adopt Hib vaccine, which substantiated the findings of previous studies. Added Shearer, "While high vaccine prices hinder adoption, the absence of long-term, stable



financing policies at the global level had an even more detrimental effect."

The World Health Organization estimates 2.1 million people died worldwide in 2002 due to vaccine-preventable diseases. "GAVI has been hoping to accelerate the speed at which poor countries get access to life-saving vaccines. This study shows how successful these efforts have actually been," said David Bishai, MD, PhD, MPH, senior author of the study and associate professor in the Bloomberg School's departments of Population, Family and Reproductive Health and International Health.

Provided by Johns Hopkins University Bloomberg School of Public Health

Citation: Keeping up with the neighbors speeds vaccine use (2010, March 15) retrieved 4 May 2024 from https://medicalxpress.com/news/2010-03-neighbors-vaccine.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.