Shared decision-making between doctors and patients can reduce antibiotic use

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A training tool that helps physicians involve patients in decision-making can reduce the use of antibiotics for acute respiratory infections, according to a study published in *CMAJ* (*Canadian Medical Association Journal*).

Antibiotics are prescribed too often for acute respiratory infections, even though many are not bacterial infections and therefore will not respond to antibiotic use. Overuse of antibiotics is a health concern and may be contributing to antibiotic resistance.

Researchers conducted a cluster randomized trial to determine the impact of a shared decision-making training program called DECISION+2 on the use of antibiotics. Shared decision-making, in which a health care professional and patient make a decision together based on evidence and patient preferences, has been shown to be effective when benefits of treatment are not clearly evident for all patients.

The study was divided into two groups, one group of 181 patients who consulted 77 physicians in 5 family practice teaching units using DECISION+2 and a control group of 178 patients who consulted 72 physicians in 4 family practice teaching units. DECISION+2 included an online tutorial followed by an interactive workshop.

"After the intervention, patients in the DECISION+2 group were significantly less likely than patients in the control group to report a

decision to use antibiotics immediately after consultation," writes Dr. France Légaré, Research Centre of Centre Hospitalier Universitaire de Québec and Department of Family Medicine and Emergency Medicine, Universitaire Laval, Québec, with coauthors. "The reduction in decisions to use antibiotics was observed in all intervention teaching units, while an increase was seen in 3 of 4 teaching units in the control group."

The results of this study are similar to those from an earlier pilot study that looked at the feasibility of this larger trial.

"These studies indicate that a combination of live and media education are generally effective in changing physician performance in the context of antibiotic use for acute respiratory infections," write the authors. "These findings are important given the debate and widespread skepticism about the effect of medical education on the performance of physicians in the practice setting."

More information: Study online: www.cmaj.ca/lookup/doi/10.1503/cmaj.120568

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