How Behavioral Science Can Help World Leaders Reach Vaccination Goals

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As part of World Immunization Week kicking off April 24, the World Health Organization (WHO) is calling for increased investment in getting families vaccinated. Scientists have already tested some effective behavioral strategies that show promise in helping WHO reach its goal.

In <u>a comprehensive report</u>, psychological researcher Noel T. Brewer of the University of North Carolina and coauthors evaluate the scientific evidence for various vaccination promotion strategies, highlighting those that are likely to impel adults to get vaccinations for themselves and their children and those that aren't. The findings appear in the current issue of the APS journal *Psychological Science in the Public Interest*.

Listen to APS Fellow **Gretchen Chapman** discuss the report, which she co-authored, in an interview on the BCC World Service program Health Check. The interview starts about 20 minutes into the segment.

The researchers conclude that the techniques most likely to motivate people to get inoculated against diseases like influenza, hepatitis, and human papillomavirus (HPV) are those that build on the positive attitudes and intentions that patients already have.

These evidence-based techniques include:

- **defaults**, having healthcare providers make vaccinations a default component of patient care such that patients must opt out of vaccination if they don't want to receive them
- **reminders**, sending emails, text messages, or phone messages to remind patients that they're due for an inoculation
- **concrete plans,** encouraging patients to make a specific plan for getting vaccinated, identifying the specific date, time, and location that they will do so
- **requirements**, making vaccinations a condition of school admission or employment, particularly in healthcare settings where employee vaccination rates are critical but fall below 90 percent. (In 11 European countries, fewer than 30 percent of health-care workers are vaccinated against seasonal influenza, one study showed.)

Brewer and coauthors Gretchen B. Chapman (Carnegie Mellon University), Alexander J. Rothman (University of Minnesota), Julie Leask (University of Sydney), and Allison Kempe (University of Colorado Anschutz Medical Campus) also conclude that there is little evidence that educational campaigns aimed at changing people's perceptions and attitudes about vaccines are effective.

The researchers examined the latest findings from a variety of fields, including psychological science, public health, medicine, nursing, sociology, and behavioral economics. Their conclusions are supported by multiple sources of evidence, but they note that much of the available research on vaccination behavior is limited in quality or quantity. Studies investigating vaccination attitudes and behavior over time are rare and few studies examine the specific mechanisms or components that make for effective interventions.

Despite these limitations, cross-continent studies show that vaccine acceptance tends to be high overall and the factors that motivate vaccination are similar across countries.

The full report and commentary are available for free to the public online.