

Increasing Appropriate Vaccination: Community-Wide Education When Used Alone

Task Force Finding and Rationale Statement

Intervention Definition

Community-wide education disseminates information to most or all of a target population in a geographic area with the goal of motivating individuals to seek recommended vaccinations. Materials and messages typically focus on the importance of vaccinations and inform people when and where they can get vaccinated. Approaches may include person-to-person interactions, community mobilization, and mass or small media. These interventions may also provide information to vaccination providers in the community.

Task Force Finding (September 2015)

The Community Preventive Services Task Force finds insufficient evidence to determine the effectiveness of community-wide education when implemented alone in increasing vaccination rates or reducing rates of vaccine preventable illness. Evidence is considered insufficient due to inconsistent results and concerns about the applicability of evidence to more diverse communities in the United States where improvements in vaccination rates are needed.

Rationale

Basis of Finding

This Task Force finding is based on evidence from a Community Guide systematic review completed in 2010 (6 studies with 8 study arms, search period 1980-2009) combined with more recent evidence (1 study, search period 2009-February 2012). Based on the combined evidence, the Task Force reaffirms its finding of insufficient evidence.

The Task Force considered evidence from 7 studies with 9 study arms. Among the studies providing a common measure of change in vaccination rates (4 studies with 6 arms) there was a median increase of 6 percentage points (range of values: 0.4 to 12.2 percentage points).

Three studies evaluated mass media activities using different measures of change. In a targeted community in Australia, pneumococcal vaccines dispatched to service providers increased during the period of a mass media campaign. In Finland, a mass media campaign briefly increased MMR vaccine receipt for children 6 years of age, though changes were not reported for younger children. In the U.S., a mass media campaign addressing flu-related topics among a nationally representative population of older adults found a positive association between flu-related media reports and influenza vaccination rates in the weeks following the campaign (annual vaccination rates increased by 2.3-7.9 percentage points, $p < 0.001$).

One U.S. study observed moderate increases in vaccination rates for hepatitis B vaccine following intensive community-wide educational efforts in two Vietnamese-American communities. Characteristics of the study communities that may have contributed to intervention effectiveness included: (1) popular Vietnamese-language media, (2) established Vietnamese service organizations, and (3) culturally appropriate strategies and materials.

Other Benefits and Harms

A review of included studies and the broader literature did not identify any additional benefits or potential harms associated with this intervention.

Considerations for Implementation

Community-wide education is commonly implemented in combination with additional interventions (such as efforts to expand and enhance access to vaccinations). In another review, the Task Force found strong evidence of effectiveness for community-based interventions implemented in combination to increase vaccination rates, and five of the included studies used community-wide education in the combination of interventions.

Evidence Gaps

Although the Task Force finds insufficient evidence to determine the effectiveness of community-wide education when implemented alone, two studies suggest that these interventions may be useful with certain communities. More research is needed to understand the potential applicability of these interventions to other populations, and for other vaccines.

The Task Force acknowledges an important role for mass media (and the potential role of social media) in disseminating information to large audiences and shaping public attitudes and behaviors.

Vaccine manufacturers have been increasing direct-to-consumer mass and small media advertising to promote new vaccines. While evidence from private sector marketing campaigns on vaccine uptake was not included in this review, the Task Force considered the applicability of these marketing experiences to public health efforts. They determined that community-wide educational efforts may have greater impact when used to inform members of the community about new vaccines (such as HPV), or new recommendations (such as the universal recommendation for seasonal influenza), and in situations of public health urgency (such as the H1N1 pandemic). The effectiveness of community-wide education to increase vaccination rates in these circumstances remains an important issue for further evaluation research.

The data presented here are preliminary and are subject to change as the systematic review goes through the scientific peer review process.

Disclaimer

The findings and conclusions on this page are those of the Community Preventive Services Task Force and do not necessarily represent those of CDC. Task Force evidence-based recommendations are not mandates for compliance or spending. Instead, they provide information and options for decision makers and stakeholders to consider when determining which programs, services, and policies best meet the needs, preferences, available resources, and constraints of their constituents.

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