Improving Access to Credible and Relevant Information for Public Health Professionals: A Qualitative Study of Information Needs in Communicable Disease Control

Nancy R. LaPelle
University of Massachusetts Medical School

Et al.

Follow this and additional works at: https://escholarship.umassmed.edu/lib_articles

Part of the Library and Information Science Commons

Repository Citation

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in Library Publications and Presentations by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.
Improving Access to Credible and Relevant Information for Public Health Professionals

A Qualitative Study of information Needs in Communicable Disease Control

November 8, 2004

conducted by:
University of Massachusetts Medical School Library

funded by:
Center for Disease Control and Prevention
Association of Teachers of Preventive Medicine
Project TS-0734
Project Staff

Principal Investigator:
• Elaine Martin

Project Coordinator:
• E. Hatheway Simpson

Consultants:
• Nancy La Pelle, PhD
• Roger Luckmann, MD
Outline

- Project Background & Purpose
- Study Detail/Findings
- Future Project Directions
Project Background

• Evidence can be applied to solve public health problems if readily accessible

• Improved access may be needed to high quality, evidence-based public health practice information

• Evidence-Based Practice for Public Health Project Website: http://library.umassmed.edu/ebpph
Project Purpose

• Use qualitative method to determine evidence-based practice information needs of public health (PH) workers
  – Find out how PH professionals currently access information and what enhancements they need

• Make recommendations to the CDC to improve access to PH information
Qualitative Study Detail

Sample:

- 12 State level public health (PH) professionals
- Bureau of Communicable Disease Control
- Those with strongest info accessing needs

Data Collection & Analysis:

- Taped/transcribed key informant interviews
- Taped/transcribed follow-up focus group
- Thematic analysis of all data
Focus of Individual Interview

- Type of work tasks performed requiring access to critical external information?
- Current used and preferred info sources (online and offline)?
- Preferred format for research reports (abstracts, full text, reviews/commentaries)?
- Current barriers to information access?
- Desired enhancements for access?
Findings Related to Context

- All DPH staff have PCs, access to internet
- Large sophisticated DPH website
- Multiple DPH sites and more than one library site
- Urgency of information need differs widely
- Electronic information access differs widely
Findings/Information Needs Continuum Emerged

Formal Research Support for Information

None  Emerging disease  Emerging practices  Established diseases  Reference info  Policies and guidelines  Published research reports  Some

Different sources for different info needs
## Findings/Information Needs Continuum Emerged

<table>
<thead>
<tr>
<th>Info Focus</th>
<th>Example</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging disease</td>
<td>SARS</td>
<td>Alerts</td>
</tr>
<tr>
<td>Emerging practices</td>
<td>STD</td>
<td>Solicited info/conferences</td>
</tr>
<tr>
<td>Established diseases</td>
<td>TB</td>
<td>Website search</td>
</tr>
<tr>
<td>Policies and guidelines</td>
<td>Immunization</td>
<td>Website search</td>
</tr>
<tr>
<td>Published research</td>
<td>Effective Interventions</td>
<td>Journal search engines</td>
</tr>
</tbody>
</table>
Findings/PH Info Access Needs Not Currently Met

- Organizing/filtering requested and unsolicited information
- Access to relevant journals/full text of articles
- One portal access with good search engine
- Access to practice info in all sub-domains of interest (information gaps)
- Training re: how to access info electronically
- Real time access to info at home & in the field
Public Health Information Models

1. Research Reports:
   - Simple or predefined searches of research report collections
   - Alerts & archiving
   - Summaries/commentaries/critiques

2. Evidence-based reviews and resources

3. Comprehensive knowledge sources
Enter one or more search terms, or click Preview/Index for advanced searching.

Enter author names as smith jc. Initials are optional.

Enter journal titles in full or as MEDLINE abbreviations. Use the Journals Database to find journal titles.

PubMed, a service of the National Library of Medicine, provides access to over 12 million MEDLINE citations back to the mid-1960's and additional life science journals. PubMed includes links to many sites providing full text articles and other related resources.
HP2010 Information Access Project

Search by Focus Area

This site lets you search for published literature related to the Healthy People 2010 focus areas.

- Access to Quality Health Services
- Diabetes
- Disability and Secondary Conditions
- Environmental Health
- Food Safety
- Health Communication
- Hearing Objectives
- Nutrition and Overweight
- Oral Health
- Physical Fitness
- Public Health Infrastructure
- Respiratory Diseases
- Vision
PubMed Search on Drug Resistant Salmonella

united states[mh] AND (salmonella infections[majr] OR salmonella[majr]) AND drug resistance[majr] AND (prevention and control[subheading] OR prevention OR public health OR disease outbreaks OR population surveillance OR risk factors OR prospective studies OR case-control studies OR follow-up studies OR comparative study OR pilot projects OR retrospective studies OR longitudinal studies OR infection control) AND english[lang] AND human[mh]
About Email Alerts

The Journal's email alerting service allows anyone who registers their email address to be notified when new content goes online. You may choose to receive any or all of the following:

- Notification that an advance table of contents of the American Journal of Public Health is online
- Current table of contents with links to the issue at the time it is posted
- Special announcements from APHA

This is a free service -- Sign up now!

http://www.ajph.org/subscriptions/etoc.shtml
Welcome to SafetyLit, the online source for recent research about injury prevention.

Information about the occurrence and prevention of injuries is available from many sources and disciplines. SafetyLit staff and volunteers regularly examine more than 300 journals and scores of reports from government agencies and organizations. The weekly update is posted before 6 a.m. GMT every Monday morning. Each week SafetyLit online abstracts are read by 29,000 people from 168 nations.

In addition to this Web-based SafetyLit update, we also provide a free email announcement of the titles, authors, and publishers of the abstracts included in each weekly update. An online form
Some Answers to Smallpox Vaccination Questions

The progress of the U.S. smallpox vaccination effort has been difficult to follow in the media. Now, reports from both military and civilian programs answer many of the questions that physicians and patients might have about this controversial endeavor.

Department of Defense health officials reported that, in less than 6 months, 450,293 military personnel were vaccinated (70% for the first time) similar to those reported in past series; complications included vaccinia (36 cases), myopericarditis (37 cases), and 1 case of vaccination-related fatalities occurred. Ten HIV-infected military personnel were inadvertently, with no complications; follow-up continues in those who were vaccinated inadvertently.

In a separate report on the military vaccination program, a total of 18 vaccine-related myopericarditis cases. All were young men who had not been vaccinated previously. Characteristic symptoms occurred 10 to 14 days after vaccination, and patients either had recovered or continued to improve at the time of the report. All diagnoses were made by excluding other likely causes of pneumonia and sepsis.

Comment: Editorialists call the observation that smallpox vaccine can be administered safely to military personnel "a critically important piece of new information," although they note that complication rates could be higher in older, less carefully screened, civilian populations. We don't know if long-term persistence of neutralizing antibody titers confers complete protection against disease, but the presence of even moderate titers in the previously vaccinated cohort ultimately could be helpful in constructing vaccine policies for older people.

— Abigail Zuger, MD
Mammography screening in the USA has higher recall rates and lower cancer detection rates than in the UK.

Roger Luckmann, MD, MPH (Commentary Author)

Department of Family Medicine and Community Health, University of Massachusetts Medical School, 55 Lake Ave. N., Worcester, MA 01655, USA

Summary

Question: Do mammography screening programmes in the UK and USA generate different recall and cancer detection rates?

Study design: Outcomes analysis, international screening programme comparison.

Main results: The incidence of breast cancers among women in the US and UK programmes was comparable. In all age groups, recall rates were significantly higher in both USA screening programmes for first and subsequent screens compared with the UK programme (see Table 1). Total cancers detected per 1000 were significantly higher in the UK in all age groups (see Table 2). In situ and invasive cancer detection rates were similar between programmes for first screen mammograms. In situ cancer detection rates were similar between programmes for subsequent screening mammograms.
NGC Search Results

Your search criteria:

Keyword: public health

Your search found 474 related guidelines, which are listed below.

To view a guideline summary, click on a title. The default view is the Brief Summary, from which you can also view the Complete Summary, Guideline Synthesis and Full-Text, where available.

To prepare a Guideline Comparison, add any of the guidelines listed to "My Collection" by selecting that guideline (check the box) and clicking the "Add to My Collection" button. For additional help, see Guideline Comparison Help.

Remember - Check the box next to a guideline to add it to "My Collection". Then click on the "Add to My Collection" button located on the page.

Search Results:

The following guidelines were retrieved because they are linked to concepts related to your query or because they contain the words in your query. Search results are listed in order of relevance, unless otherwise specified in a Detailed Search.

Display results 1 to 20 of 474

<table>
<thead>
<tr>
<th>Title</th>
</tr>
</thead>
</table>
Vaccine Preventable Disease

http://www.thecommunityguide.org

OVERVIEW

The Community Guide's systematic review of the effectiveness of selected population-based interventions aimed at improving vaccination coverage in children, adolescents and adults focused on strategies within three strategic areas:

1. Increasing community demand for vaccinations
2. Enhancing access to vaccination services
3. Provider-based interventions

One page summary of findings

Economic Effectiveness Findings

INTERVENTIONS

<table>
<thead>
<tr>
<th>Strength of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended (Strong Evidence)</td>
</tr>
<tr>
<td>Recommended (Sufficient Evidence)</td>
</tr>
<tr>
<td>Insufficient Evidence to Determine Effectiveness</td>
</tr>
</tbody>
</table>

Increasing Community Demand

- **Client Recall/Reminder**
- **Multicomponent Interventions with Education**
- **Require for Child Care & School Attendance**
- Community-wide education only
- Clinic-based education only
- Client or family incentives
- Client-held medical records

Enhancing Access to Vaccination Services

- **Reducing Out-of-Pocket Costs**
- **Multicomponent Interventions for Expanding Access**
- **Expanding access only**
- **Women, Infants, & Children (WIC) Programs**
- **Home Visits**
http://www.uptodate.com/

Most Relevant Topics (23 titles)
- Overview of osteoporosis in men
- Overview of the management of osteoporosis in women
- Screening for osteoporosis
- Calcitonin in the prevention and treatment of osteoporosis
- Calcium supplementation in osteoporosis
- Clinical manifestations and diagnosis of osteoporosis
- Clinical use of the bisphosphonates in osteoporosis
- Epidemiology and causes of osteoporosis
- Estrogen replacement therapy in the prevention and treatment of osteoporosis
- Fluoride therapy in osteoporosis
- Glucocorticoids and osteoporosis: Pathogenesis and clinical features
- Osteoporosis after transplantation
- Overview of metabolic bone disease
- Pathogenesis of osteoporosis
- Prevention and treatment of glucocorticoid-induced osteoporosis
- Use of biochemical markers of bone turnover in osteoporosis
- Vitamin D therapy in osteoporosis
- Drugs that affect bone metabolism
- Medical consultation for patients with hip fracture
- Patient information: Calcium supplementation in osteoporosis
- Patient information: Overview of osteoporosis
- Patient information: Prevention and treatment of osteoporosis
- Use of selective estrogen receptor modulators in postmenopausal women
Screening for osteoporosis

Hillel N. Rosen, MD
Denise S. Basow, MD

UpToDate performs a continuous review of over 270 journals and other resources. Updates are added as important new information is published. The literature review for version 10.2 is current through April 2002; this topic was last changed on April 24, 2002. The next version of UpToDate (10.3) will be released in October 2002.

Screening for osteoporosis may be justified based upon the following observations:

- The disease is common
- It is associated with high morbidity, mortality, and cost
- Accurate and safe diagnostic tests are available
- Treatment is effective

Nevertheless, a widespread approach to screening has not been universally adopted, in part due to cost and questions regarding the efficacy of a broad population screening policy [1]. The issues surrounding the screening for osteoporosis are reviewed here.

EPIDEMIOLOGY — The burden of suffering associated with osteoporosis is illustrated by the following observations (see "Epidemiology and causes of osteoporosis"):

- It is estimated that over 1.3 million osteoporotic fractures occur each year in the United States [2]. Pelvic and hip fractures are associated with increased mortality, although conditions other than the fracture itself may account for most of the deaths [3].

- The risk of all fractures increases with age (show figure 1); among persons who survive until age 90, 33 percent of women and 17 percent of men will have a hip fracture [4]. The estimated lifetime risk of hip fracture for white women at age 50 is about 16 percent (versus five percent for men), with similar risks for vertebral or forearm fractures.

- Using a strict definition of osteoporosis (bone mineral density [BMD] 2.5 SD below the mean of young women), a large survey in the United States found the prevalence was 13 to 18 percent in women above 50 years of age and 3 to 6 percent in men of the same age [5].
Focus Group Reactions to Models Presentation

- Pre-formulated searches for search engines
  - Need useful PH keyword categories

- Pre-formulated Alerts/listserves & archival website
  - CDC should expand services like TB Update to other diseases (summary and links)
  - Need useful PH keyword categories
Focus Group Reactions to Models Presentation

Less reaction to more sophisticated models

- **Research Reports:**
  - Simple or predefined searches of research report collections
  - Alerts & archiving
  - Summaries/commentaries/critiques

- **Evidence-based reviews and resources**

- **Comprehensive knowledge sources**

Need up-to-date list of free online resources
Future Project Directions

• Repeat study with other PH professionals in other domains
• Compare and contrast information needs
• Make recommendations to CDC regarding evidence-based information resources for PH workers
• Enhance project website with resources related to findings