Developing public health interventions model improving access to the public health gray literature
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Abstract: Our poster will summarize the development of an intervention model for public health documents and provide a project update on the development of a natural language tool to improve access to difficult to find public health information.

Introduction: Increasingly reports on public health intervention are placed on the Internet but are poorly organized and difficult to access. Our RWJ project “Modeling Public Health Interventions for Improved Access to the Grey Literature”, focuses on how to make information on public health interventions accessible to public health policy makers, funding agencies and program developers. With input from public health professionals we are using Natural Language Processing techniques to identify, characterize, and summarize key text elements of documents concerning public health interventions.

Methods: A test collection of 300 gray literature public health documents were gathered from 5 websites: The NYAM’s Grey Literature Reports, the Minnesota Department of Health website, the Hennepin County Health Department website and the Lake County website. Document analysis provided us with preliminary model of public health interventions. We confirmed the importance of the elements by surveying 20 public health professionals solicited through a 4 professional public health list serves. Participants were selected based on professional background and current work setting. Participants were surveyed on the type of documents they sought at work and asked to rank bibliographic elements in terms of determining if a document might be useful. Each participants received 4 sample documents and asked to write an abstract based on key content elements

Results: Participants listed title, publication date and subject as the most bibliographic elements used in determining if a public health document was useful. Although we did not consider abstracts as bibliographic elements 4 people listed abstract as a key element under “other”.

Although the written abstracts differed from person to person all abstracts included a problem statement, a description of the intervention and/or the purpose of the report. The date of the documents and the intervention, the organization or group responsible for creating the document were also included in most participant abstracts. Statistical or demographic reports abstractors generally mentioned the parameters studied

Based on our analysis if the public health gray literature documents and the input from public health professions key elements of Public Health Interventions include:
- Problem
- Background Information
- Description of Intervention
- Type of Intervention
- Intervention Method, date, setting, target population outcomes
- Document type

Conclusions: Preliminary results of our study have revealed:
1. Although the grey literature of public health is extremely diffuse in subject and format, our analysis of 300 public health grey literature documents indicates that the literature could be organized according to a public health intervention model.
2. Input from public health professionals substantiated our initial intervention model. Key elements extracted from documents included identification and description of a public health problem, the individuals or groups addressing the problem and the target population. An intervention was described and outcomes listed in the majority of abstracts.
3. A group of public health professionals identified title, publication date and subject as the most important bibliographic elements used in determining if a document might be useful. Many participants added that abstracts were critical in deciding whether or not to obtain a document.

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