Redevelopment and evaluation of EpiData: A practical software tool for use in the public health field

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Background: EpiData Entry and EpiData Analysis are key tools for case and outbreak data management, both in Canada and internationally. Based on field input and pilot testing, the full scope of EpiData capability has yet to be realized. This project focuses on the development and evaluation of standardized tools used for epidemiological training and field management of outbreaks on an national and international scale.

Methods: With funding received by the Public Health Agency of Canada (PHAC), the EpiData Association in Denmark and the Association of Public Health Epidemiologists in Ontario (APHEO) have been collaborating since 2007 on the redevelopment and evaluation of EpiData software applications. EpiData is a free software suite designed to assist epidemiologists, public health investigators and other public health professionals in entering, managing, and analyzing data in the field. The software was created in 1999 and is maintained by the EpiData Association in Denmark. It is also used as a training tool internationally, including the Public Health Agency of Canada’s (PHAC) Canadian Field Epidemiology Program.

Through in-person meetings, targeted surveys, and solicited feedback from key public health partners, gaps in knowledge and awareness regarding the functionality and use of EpiData have been assessed, and used to define the knowledge products for development.

Results: To date, software development has focused on functionality applicable to a range of public health tasks, including the investigation and management of infectious disease outbreaks. Knowledge translation of these advances has been conducted through development of field guides and hands-on workshops. The next phase of the project will focus on developing tools for the use of EpiData in areas outside of communicable disease investigations, including surveys, program evaluation, and management of chronic disease data.

Conclusion: This poster provides an overview of the Evaluation and Redevelopment EpiData project, and outlines the initiatives currently underway.

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Similarities and differences between persons of higher and lower income in Argentina, concerning their knowledge on vertically transmitted diseases

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Background: The fact that individuals in higher income brackets have easier access to general information raises the question whether the individuals in lower brackets are receiving insufficient medical knowledge. The countrywide vaccination campaign against rubella allowed us to observe a young and healthy adult population that was a fair representation of two social strata; this was ideal for the purpose of our investigation.

So, we tried to assess the degree of knowledge regarding vertically transmitted diseases by these two groups of citizens of different social and cultural levels.

Methods: Our population performed two groups, the first one attending a community hospital of a very high social and cultural level in the city (GROUP #1, with 508 males and 96 females), and a second one belonging to a low income health center in a lower income area outside the city (GROUP #2, with 84 males and 94 females). Both groups responded anonymously to the survey on vertically transmitted diseases.

Results: Disease Hospital Alemán William Morris

<table>
<thead>
<tr>
<th>Disease</th>
<th>Hospital Alemán</th>
<th>William Morris</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxoplasmosis</td>
<td>46%</td>
<td>46%</td>
</tr>
<tr>
<td>HIV</td>
<td>81%</td>
<td>76%</td>
</tr>
<tr>
<td>HBV</td>
<td>53%</td>
<td>40%</td>
</tr>
<tr>
<td>Rubella</td>
<td>24%</td>
<td>48%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>24%</td>
<td>30%</td>
</tr>
<tr>
<td>HPV</td>
<td>21%</td>
<td>35%</td>
</tr>
</tbody>
</table>

GROUP #1 showed to have a better knowledge than GROUP #2 regarding HIV and Hepatitis B (81% to 76%). However GROUP #2 identified Chagas disease and Syphilis more readily than GROUP #1 (30% to 24% and 35% to 21% respectively) as vertically transmitted diseases; for German Measles the proportion was even higher (GROUP#1: 24% and GROUP #2: 48%).

Conclusion: Possibly, the higher incidence of Chagas disease and the compulsory testing for Syphilis in the health center attended by GROUP #2 are the variables that led to a slight increase of awareness of these illnesses by the latter. It is surprising though that, despite the fact that this study was conducted at the time of the German Measles vaccination process, both groups showed a low recognition level of this disease being vertically transmitted. The degree of awareness of vertically transmitted infections is generally low, and better access to information does not seem to play a determining role in the level of awareness amongst a healthy, young population. Other strategies have to be tried.

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