Domestic violence surveillance system: a model

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Abstract
Objective. To develop a domestic violence surveillance system. Material and Methods. The strategies included implementation of a standard digitalized reporting and analysis system along with advocacy with community decision makers, strengthening inter-institutional attention networks, consultation for constructing internal flow charts, sensitizing and training network teams in charge of providing health care in cases of domestic violence and supporting improved public policy prevention initiatives. Results. A total of 6,893 cases were observed using 2004 and 2005 surveillance system data. The system reports that 80% of the affected were women, followed by 36% children under 14 years. The identified aggressors were mainly females’ partners. The system was useful for improving victim services. Conclusions. Findings indicate that significant gains were made in facilitating the attention and treatment of victims of domestic violence, improving the procedural response process and enhancing the quality of information provided to policy-making bodies.

Key words: domestic violence; health surveillance; inter-sectorial action; prevention and control; public policies

For over a decade, violence –defined as “the use or threatened use of physical force with the intent to cause harm to oneself or others”—1 has been increasingly recognized as a public health issue that best employs an epidemiological approach.2 This approach places an emphasis on developing reliable surveillance and monitoring systems to collect accurate data on incidence, prevalence, settings, and victim and perpetrator characteristics for selected events. Subsequently, the data of victims and perpetrators are examined to
Domestic violence is a major public health problem and social issue.\textsuperscript{3,4} It falls within the broader category of interpersonal violence\textsuperscript{5} and may be defined as violence involving every act or omission committed by any member of the family in a position of power or trust—regardless of the physical space where it occurs—which harms the well-being, the physical or psychological integrity or freedom, and the right to full development of another family member.\textsuperscript{6}

According to the recent WHO multi-country study on women’s health and domestic violence, abused women were twice as likely as non-abused women to have poor health and physical and psychological problems, even when the violent acts occurred years before.\textsuperscript{3} Up to one-half of women physically assaulted suffered physical injuries and the costs of health care were significantly higher due to more frequent visits to emergency departments throughout their lives.\textsuperscript{3} This finding also applies to the victims of child abuse and neglect.

Both the severity of the problem and the broad range of its occurrence are relevant issues. On a regular basis, domestic violence affects the lives of many. In fact, a report by the World Health Organization indicates that domestic violence produces the majority of intentional injuries for women between 15 and 44 years of age.\textsuperscript{7} In Latin America and the Caribbean, domestic violence affects between 10 and 75% of the population. In Chile, 63% of children in eighth grade had suffered physical violence at home.\textsuperscript{3}

Two aspects make effective prevention of domestic violence particularly difficult:

1. The inter-generational nature of its effects, e.g., female children of abused mothers are more likely to be abused as adults, and male children of abused mothers are more likely to be abusers as adults;\textsuperscript{5,6,7} and,

2. The hidden quality of family violence. There is under-reporting of cases, with only an estimated 2 to 20% of incidents being reported.\textsuperscript{5,8} An example of this was documented in a study done in health institutions in Cali, Colombia by the Institute for the Study of Violence/Injury Prevention and the Promotion of Coexistence (CISA), in which only 13% of the women perceived themselves to be victims of some type of abuse, although 47.6% of them were identified as battered women by health care providers. In this same group, 34.7% turned out to be constantly subjected to severe abuse.\textsuperscript{9}

Our project addressed this latter problem through increasing institutional competencies and public awareness of these services.

For over a decade, violence has been addressed in Colombia as a public health problem, and domestic violence as an important symptom. In 2004, the Colombian Department of Legal Medicine reported the occurrence of 59,770 cases of domestic violence.\textsuperscript{10} Of those, 9,847 were cases of child abuse, 36,901 involved partner violence and 13,022 were injuries caused by other family members. According to the same source, in 2002 domestic violence was acknowledged in 64,979 cases, 62% of which correspond to partner violence, 23% to violence between family members and 16% to child abuse.

Objective

To address this problem, in 2002 CISA undertook a four-year project to implement an epidemiological surveillance system related to domestic violence that might eventually have, as a result, violence prevention and the improvement of care for domestic violence victims in the province of Valle, Colombia. With the support of the Secretary of Health of Valle, resources from the basic health plan (PAB) were allocated for strengthening the municipal reporting system and the response to domestic violence.

Materials and Methods

The project was developed between 2002 and 2005 in 21 municipalities situated in the province of Valle. It had three phases for implementation: Eleven municipalities were selected in the first phase (2002-2003), six smaller municipalities in the second (2003-2004), and four additional sites in the third phase (2004-2005). To accomplish the purpose of this paper, only information from 2004 and 2005 was taken into account. During these two years, information from the 21 municipalities was completed (table 1). These municipalities were jointly selected with the Province Health Secretary authorities according to population size and political importance.

The work started with the creation of Observatories of Domestic Violence. These “observatories” (domestic violence surveillance systems)\textsuperscript{11} were expected to develop knowledge and expertise in order to 1) geographically reference and plot within the neighborhood...
the locations of reported cases of domestic violence; 2) develop a prevention strategy and early detection of child abuse and domestic violence; 3) construct charts for decision making for each institution, and 4) construct and validate a common protocol and flow chart for the referral of victims of child abuse and domestic violence, within a network of inter-institutional prevention and treatment.

In this paper, “cases” refer to victims of domestic violence in accordance with the used definition.

More specifically, development focused on implementing seven methodological strategies as follows:

First, the project initiated a process of lobbying and sensitizing decision makers to inform and reach agreement with departmental and municipal authorities regarding timelines and execution mechanisms.

Second, observatories for domestic violence were formally established in each selected municipality. This strategy involved standardized information gathering procedures originating from the different data sources and subsequently compiling, validating and digitalizing the information through a common software program. As an outcome, the observatories presented reports providing compiled information and detailed analysis to policy decision makers, stakeholders, and interested community members. In terms of epidemiological surveillance systems (ESS), this project reflects a universal ESS system, i.e. one including all cases occurring within a defined population, with active collection and consolidation procedures. In other words, those in charge of the ESS contact the persons who record the information and request data directly from them, or verify and complete questionable or incomplete data. Third, inter-institutional networks for prevention of and attention for intra-familial violence were strengthened. This involved training in legal aspects of domestic violence, regular assessments of progress toward program objectives, and a review of updated competencies and qualifications of the individuals involved. To accomplish this, a testing process was used that objectively assessed staff knowledge of flow charts to screen child abuse cases, procedural manuals, and technical documents outlining agency competencies and integral involvement in the care process.

Fourth, the project developed consensual inter-institutional flow charts for the attention of domestic violence

Table I

<table>
<thead>
<tr>
<th>Municipality</th>
<th>n</th>
<th>Women</th>
<th>Men</th>
<th>0-14 %</th>
<th>15-44 %</th>
<th>Aggressors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tulú</td>
<td>1448</td>
<td>82</td>
<td>18</td>
<td>54</td>
<td>38</td>
<td>Former partner</td>
</tr>
<tr>
<td>Sevilla</td>
<td>349</td>
<td>83.5</td>
<td>16.5</td>
<td>2</td>
<td>83</td>
<td>Former partner</td>
</tr>
<tr>
<td>Buga</td>
<td>801</td>
<td>77.4</td>
<td>22.6</td>
<td>34</td>
<td>43</td>
<td>Former partner</td>
</tr>
<tr>
<td>Cartago</td>
<td>57</td>
<td>70.2</td>
<td>29.8</td>
<td>25</td>
<td>53</td>
<td>Partner/Mother</td>
</tr>
<tr>
<td>Palmira</td>
<td>665</td>
<td>72.5</td>
<td>27.5</td>
<td>17</td>
<td>37</td>
<td>Partner/Eldest sons or daughter</td>
</tr>
<tr>
<td>Jamundi</td>
<td>1316</td>
<td>66</td>
<td>34</td>
<td>47</td>
<td>42</td>
<td>Former partner</td>
</tr>
<tr>
<td>Buena Vista</td>
<td>969</td>
<td>81.6</td>
<td>18.4</td>
<td>16</td>
<td>58</td>
<td>Former partner</td>
</tr>
<tr>
<td>Florida</td>
<td>58</td>
<td>56.8</td>
<td>43.2</td>
<td>74</td>
<td>27</td>
<td>Mother/Father</td>
</tr>
<tr>
<td>Caicedonia</td>
<td>323</td>
<td>64</td>
<td>36</td>
<td>63</td>
<td>30</td>
<td>Father/Father</td>
</tr>
<tr>
<td>Ansermanuevo</td>
<td>18</td>
<td>60</td>
<td>40</td>
<td>39</td>
<td>57</td>
<td>Partner/Father</td>
</tr>
<tr>
<td>Zarazú</td>
<td>261</td>
<td>77</td>
<td>23</td>
<td>14</td>
<td>33</td>
<td>Partner/Father</td>
</tr>
<tr>
<td>Pradera</td>
<td>130</td>
<td>74.6</td>
<td>25.4</td>
<td>56</td>
<td>37</td>
<td>Partner/Other</td>
</tr>
<tr>
<td>Yotoco</td>
<td>50</td>
<td>88</td>
<td>12</td>
<td>6</td>
<td>68</td>
<td>Partner/Father</td>
</tr>
<tr>
<td>Roldanillo</td>
<td>135</td>
<td>81.9</td>
<td>18.1</td>
<td>47</td>
<td>45</td>
<td>Partner/Father</td>
</tr>
<tr>
<td>Dagua</td>
<td>108</td>
<td>78</td>
<td>22</td>
<td>8</td>
<td>78</td>
<td>Father/Mother</td>
</tr>
<tr>
<td>Bolívar</td>
<td>19</td>
<td>73.6</td>
<td>21.4</td>
<td>5</td>
<td>59</td>
<td>Former partner/Brothers</td>
</tr>
<tr>
<td>Ginebra</td>
<td>63</td>
<td>65</td>
<td>35</td>
<td>17</td>
<td>62</td>
<td>Partner/Eldest sons or daughter</td>
</tr>
<tr>
<td>Guacari</td>
<td>38</td>
<td>92.1</td>
<td>7.9</td>
<td>17</td>
<td>77</td>
<td>Former partner</td>
</tr>
<tr>
<td>La Unión</td>
<td>85</td>
<td>79</td>
<td>21</td>
<td>41</td>
<td>50</td>
<td>Former partner</td>
</tr>
</tbody>
</table>

Note: Cerrito and Candelaria did not contribute data to this phase of the project.
cases and group exercises for the development of internal flow charts intended to clarify the process.\textsuperscript{15}

Fifth, in each municipality the project team identified local procedures regularly employed for the prevention and early detection of child abuse. This involved providing encouragement, support, and any needed consultation in developing prevention activities identified by teachers, parents, and health or protection personnel. The promotion of children’s rights, humane childrearing practices, and assertive correction and discipline as a substitute for corporal punishment were emphasized. To provide for ongoing educational efforts the team identified a base of core facilitators and trained them in the early detection of cases.

Sixth, the project team made concerted efforts for sensitizing and training welfare and administrative teams from the network of health service providers handling cases of domestic violence. They did this in agreement with the guidelines by the Colombian Ministry of Health for Minors and Battered Women, which provides the framework for child and violence problems, among which domestic violence is included.\textsuperscript{15}

Seventh, the project provided support for the development of public policy on children, and for giving greater attention to child abuse prevention issues. This strategy promoted, within the Social Policy Councils of the municipalities, the elaboration of public action proposals aimed at influencing the social policies of the municipality. These bodies have the legal mandate to design and recommend social policy guidelines to their mayors.

In line with the development of prevention programs described in item five, the project tried to inform and educate the general community. As the overall process intended to strengthen local governance and relations with citizenry, the team project developed an indicator for the number of complaints of family violence reported by community members to authorities responsible for investigation and intervention. The number of unsubstantiated complaints or allegations was not viewed as a measure of prevention programing effectiveness, but as a measure of awareness of the problem and trust in the authorities’ capability to respond. Consequently, the project requested an evaluation of the data on the number of complaints from each of the municipalities for the first trimester of 2004 and first trimester of 2005 (figure 1).

## Results

A total of 6,893 cases were observed using 2004 and 2005 surveillance system data. The magnitude, characteristics and circumstances of cases of domestic violence were recorded. Representatives from nearly all of the participating institutions in the 21 municipalities reported improved integration and coordination of services in the quantity and quality of contacts made. The program administrators also noted greater adherence to protocol among participant institutions in inter-institutional networks, such as the Childhood and Family Sub-committees, Child Abuse and Domestic Violence Prevention Networks, and Social Policy Councils.

An increase in the number of cases registered by source information institutions was observed in all phases of the implementation process for the 21 municipalities.

In all, the principal 21 municipalities of Valle established and developed observatories, initially in Palmira, Buenaventura, Tulúa, Cartago, and Buga—intermediate cities with between 100,000 and 350,000 inhabitants—and later in smaller municipalities with populations between 30,000 and 100,000 inhabitants. In 19 of the 21 municipalities, it was possible to integrate information from at least two sources. In Cerrito and Candelaria, the process failed due to absence of political will.

Males were minimally represented, with the exception of Ansermanuevo with 40% (seven cases) and Florida with 43.2% (25 cases) of men victims (e.g., Yotoco reported 12% (six cases) and Guacarí 7.9% (three cases). On the contrary, in most municipalities, women were the victims, representing between 60 and 90% of cases. Boys and girls less than 14 years were the age group most affected by violence from their fathers,
stepparents, and in some occasions, mothers. In 13 of 19 municipalities, young people—mostly women between 15 and 45 years—suffered aggressions from intimate partners and former partners. It is worth noting that in two municipalities the older sons or daughters appeared as significant perpetrators of domestic violence against their parents, their siblings, and other relatives.

Tuluá (185,000 inhabitants) is the most striking example of this increased reporting and documentation of cases of domestic violence. During 2002, the municipality documented 192 cases of domestic violence. In 2003, the total number was 394, while for 2004 the number soared to 1,059. This represents more than a five-fold increase in reported cases over a three-year period. The reliability and validity of the data recorded by each municipal surveillance system improved. Better coordination coupled with reporting of higher technical quality resulted in more comprehensive, valid and pertinent information.

It was hypothesized that with a greater level of community awareness, increased confidence in authorities and the improvement of the registry of cases, the number of complaints would rise. Three municipalities, Buga, Florida, and Caicedonia, did report gains in the number of complaints filed (average 21.6%) from 2004 to 2005.

Government officials and decision makers were offered workshops on these issues and they became aware of the magnitude of domestic violence in their localities to such an extent that they decided to establish the observatories and helped in their development. In the localities joining the project during the last year, it was possible to develop shared activities, strengthen networks, and in general modify structures to facilitate better attention for victims and improve the exchange of information.

As a result of the project, all the observatories currently use geo-referenced systems that allow them to locate and intervene in cases of violence. For example, during the implementation of the observatories, the number of reports of domestic violence increased in Tuluá, as shown by the maps identifying cases. This mapping proved to be one of the most useful tools in our work (figure 2). In Tuluá, as a result of the mapping, local authorities created new centers for the attention of those affected by domestic violence, including extended hours of attention up to 24 hours and during weekends.

![Figure 2. Tuluá, locating cases of domestic violence. 2004](image-url)
**Discussion and Conclusions**

The most direct beneficiaries of the increased efficiency and effectiveness in service delivery of this project were: the public institutions for health, social protection and justice; local governmental administrators, and educational and other community agents, such as family educators, nursery school teachers and community mothers.

Significant gains were made on four fronts:

1. Facilitation and coordination of the attention and treatment of victims of domestic violence;
2. Encouragement and support for increased public reporting;
3. Improved procedural response process, and
4. Enhanced reliability and validity of the information provided to policy makers.

The number of inter-agency meetings conducted and the number of flow charts completed and coordination protocols developed suggest that improvements occurred in every community with respect to the quality of procedural response as well as social and medical attention for victims of domestic violence. The number of informational and educational prevention campaigns launched reflects that the public had been encouraged to report cases of suspected domestic violence to appropriate public agencies. When this variable was measured in terms of the increased number of complaints filed, the difference between 2004 and 2005 was a mere 5.3%. Nevertheless, this could signify some advancement, in view of the absence of reliable information on domestic violence provided to policy-making bodies before the program was started.

The information gathered and the descriptive data compiled on the magnitude and characteristics of domestic violence was made available to departmental (provincial) authorities of Valle. Such information has been subsequently utilized by the Subcommittees for Families and Children and by the Social Policy Committees for planning prevention and intervention policies executed by the municipalities in 2004 and 2005. For example, during the implementation of the observatories, the number of reports of domestic violence increased in all municipalities. The literature reports similar increases to those seen throughout this period whenever programs as ours are implemented.17,18 Whatever the meaning of this, the importance of the development of mechanisms to more accurately identify cases of violence is a step forward towards a solution to the problem.

The technical assistance made available by CISALVA in compiling a directory for health centers and other social service sectors in the Province of Valle, the surveillance systems, and the enhanced inter-institutional coordination represent valuable tools for identifying troubled communities and vulnerable groups, as well as for providing resources to foster more effective promotion and prevention actions. Social Policy Councils have used this information for advancing a social diagnosis—a basic requirement for the formulation of social policies. Initial efforts have been directed at improving social policy to address prevention programming with an emphasis on preventing child abuse and violence against women. The effectiveness of the interventions calls for the dissemination of the methodology to the 15 remaining small municipalities in the province, as well as those throughout the region.

Measuring domestic violence is a challenging exercise.18,19 Different than in cases of violent death, where there are bodies showing the evidence, domestic violence is often a hidden phenomenon, only known to outsiders in the most severe cases based on police or other institutional reports. This limitation is a threat to the surveillance system validity and increases the possibility of information bias. The best approach to diminish this problem is through specialized surveys.

Characterization of the most frequent forms of abuse and perpetrators and identification of vulnerable groups can be used as tools to sensitize decision makers, and also serves for the formulation of certain actions to prevent violence.

CISALVA’s proposal integrates information from several sources, a method that accurately reflects reality. This is different than other Latin American systems, for example the Peruvian, where the Centers of Emergency of the Ministry of Women and Social Development receive complaints; the Nicaraguan, where women’s organizations register cases that are later referred to Women’s Commissariats dependent on the police; or the Honduran, where cases of domestic violence are registered by the office of the Director General for Criminal Investigation, and there is a surveillance system functioning at the Ministry of Health.

The information collected by the implementation of the surveillance system is a powerful tool for the detection of vulnerable groups and for improved social diagnoses from which new strategies for the prevention of domestic violence and formulation of better policies can be devised.12,18,19 It was thought that this outcome helped to construct a more accurate baseline data for social diagnostic purposes and subsequent policy initiative planning.12,18,19 While at first glance this could reflect an increased incidence of the problem, more likely this finding means increased public trust in the public agencies involved and greater awareness,
as well as increased agency competency and efficiency in systematically recording and documenting referrals and complaints. Consequently, the under-reporting problem appears to have been impacted by the project.

Moreover, to guarantee a valid and reliable surveillance system, periodic evaluations are needed. Even so, the system itself facilitates the evaluation process.

References