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This paper is one of the eight case studies in the health sector conducted under the project, “Population and Urbanization: Managing the Urbanization Process Under a Decentralized Governance Framework.” The project is jointly undertaken by the Philippine Institute for Development Studies (PIDS), the National Economic and Development Authority (NEDA) and the Development Academy of the Philippines (DAP). Among the components of the project are case studies of selected cities highlighting their innovations in health, housing, and environmental management.

The main objective of the case studies is to identify the strategies of model cities that can be replicated by other cities and local government units, particularly in the financing and delivery of basic services under devolution and increasing urbanization.

This case study focuses on Lapu-lapu City which was recommended by NEDA-Region VII as a model city for health. From being one of the lowest performers in the implementation of the Expanded Program on Immunization (EPI), the City was awarded as the Most Accelerated City in EPI in 1991. Its partnership with private companies and institutions, medical practitioners, non-government organizations, and the barangay people resulted in efficient delivery of health services at minimum cost.

The paper is organized as follows. The first section gives a backgrounder on the city, its land area and population, health facilities, financing, and performance. This is followed by a presentation of Lapu-lapu City’s strategies to promote health. The key elements for the success of these strategies are then identified in the succeeding section. The next part highlights the strategies that other cities and LGUs can replicate. Finally, the paper ends with some concluding remarks.
I. CITY BACKGROUND

Location

Lapu-lapu City, the prime tourist destination in Cebu, is located in Mactan Island, about 13 kilometers away from the Port of Cebu. It is bounded on the north and west by Mactan Channel, on the east by Bohol Strait, and on the south by the Municipality of Cordova and Bohol Strait.

Land Area and Population

The city has a total land area of 58.1 square kilometers. It is composed of 30 barangays and has about 30,838 households.

Lapu-lapu City has 100 percent urban population. In just 15 years, its population almost doubled. From 98,723 persons in 1980, population increased to 146,194 in 1990 and 173,744 in 1995. Accordingly, population density per square kilometer rose from 1,699 in 1980 to 2,459 in 1990 and 2,933 in 1995.

Health Facilities

The city has 41 Barangay Health Centers/Station (BHCs/BHSs), one government primary (community) hospital, two private primary hospitals, and one private tertiary hospital. The hospitals have a combined capacity of 130 beds, consisting of 10 beds in the government community hospital and 120 beds in private hospitals. The BHCs and BHSs are clustered into 8 health districts. These hospitals and the health districts cover certain barangays and population, as presented in Table 1.

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1 The author acknowledges the valuable assistance of the Macro Division of NEDA-Region V and of Dr. Berame, the Lapu-Lapu City Health Officer, in providing the data and information used in the case study.
Table 1. Catchment Area of Hospitals and BHSs in Lapu-lapu City

<table>
<thead>
<tr>
<th>Hospital/Health Districts</th>
<th>No. of Beds/BHSs</th>
<th>No. of Barangays</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sta. Rosa Community Hospital</td>
<td>10 beds</td>
<td>8 island brgys.</td>
<td>18,796</td>
</tr>
<tr>
<td>Tojong Maternity Clinic &amp; General Hospital</td>
<td>10 beds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our Lady of Rule Maternity &amp; General Hospital</td>
<td>16 beds</td>
<td>22 mainland brgys.</td>
<td>127,398</td>
</tr>
<tr>
<td>Mactan Community Hospital</td>
<td>94 beds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>District 1</td>
<td>5 BHSs</td>
<td>4</td>
<td>24,423</td>
</tr>
<tr>
<td>District 2</td>
<td>5 BHSs</td>
<td>2</td>
<td>41,202</td>
</tr>
<tr>
<td>District 3</td>
<td>5 BHSs</td>
<td>2</td>
<td>30,351</td>
</tr>
<tr>
<td>District 4</td>
<td>5 BHSs</td>
<td>3</td>
<td>27,179</td>
</tr>
<tr>
<td>District 5</td>
<td>6 BHSs</td>
<td>4</td>
<td>34,487</td>
</tr>
<tr>
<td>District 6</td>
<td>4 BHSs</td>
<td>4</td>
<td>22,607</td>
</tr>
<tr>
<td>District 7</td>
<td>6 BHSs</td>
<td>6</td>
<td>12,695</td>
</tr>
<tr>
<td>District 8</td>
<td>5 BHSs</td>
<td>5</td>
<td>12,945</td>
</tr>
</tbody>
</table>

Note: Population data corresponding to the catchment area of the hospitals are based on the 1990 Census of the NSO while data at health district level are based on 1997 population.

Sources: Lapu-lapu City Health Office and National Statistics Office

Health Expenditures/Budget

In 1991, prior to devolution, Lapu-lapu City’s health expenditures totalled 2.8 million which is 7 percent of its total expenditures. After devolution, health expenditures rose to P6.1 million in 1994 and 8.9 million in 1995 but its ratio to total expenditures declined to 4 percent for both years. These amounts were spent for basic health services and other health-related expenditures such as construction and maintenance/operation of facilities.

Lapu-lapu City’s budget for health for 1997 is P14.6 million. About 25 percent of this was for the city government’s counterpart for Urban Health Nutrition Project (UHNP)-initiated projects while the remaining 75 percent was for the City Health Office (CHO). The percentage of the health budget to total city budget is 5 percent. For 1998, the city allocated P4.3 million as counterpart for UHNP programs and P13.3 million for the CHO. Its health budget amounted to P17.6 million and constituted 6 percent of the total city budget. Lapu-lapu City provides free services and medicines in its BHCs/BHSs.
Health Performance

Lapu-lapu City used to perform poorly in the Expanded Program of Immunization (EPI). In 1988, it ranked second lowest among the provinces and cities in the Philippines as the proportion of its Fully Immunized Children (FIC) to the target population was only 30 percent. Its FIC rate increased substantially in the subsequent years: 80 percent in 1989 and 90 percent in 1990. In 1991, Lapu-lapu City even won the “Most Accelerated City in EPI” Award as its FIC reached 95 percent. As of 1995, its FIC rate is 104.5 percent of the target population.

With much better EPI performance, the city’s infant and child mortality rates as well as maternal mortality rates declined from 1990 to 1995 and were even lower than the average for the whole country (Table 2). Lapu-lapu City was also performing very well in nutrition. In 1990, its malnutrition rate at 59 percent was the same as the national average. By 1995, it was able to decrease substantially its malnutrition rate to 22 percent, which was much lower than the average rate of 40 percent for the Philippines.

Table 2. Mortality and Nutrition Indicators, 1990 and 1995

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lapu-lapu</td>
<td>Philippines</td>
<td>Lapu-lapu</td>
<td>Philippines</td>
</tr>
<tr>
<td>Mortality Rates:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant</td>
<td>42.0</td>
<td>56.7</td>
<td>32.8</td>
<td>48.9</td>
</tr>
<tr>
<td>Child</td>
<td>55.1</td>
<td>79.6</td>
<td>43.0</td>
<td>66.8</td>
</tr>
<tr>
<td>Maternal</td>
<td>167.7</td>
<td>209.0</td>
<td>130.8</td>
<td>179.7</td>
</tr>
<tr>
<td>Percentage of Malnourished Children (0-83 months old)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>32.1</td>
<td>41.3</td>
<td>19.5</td>
<td>30.7</td>
</tr>
<tr>
<td>Moderate</td>
<td>23.9</td>
<td>15.5</td>
<td>2.8</td>
<td>8.4</td>
</tr>
<tr>
<td>Severe</td>
<td>3.4</td>
<td>2.3</td>
<td>0.1</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td><strong>59.4</strong></td>
<td><strong>59.1</strong></td>
<td><strong>22.4</strong></td>
<td><strong>40.3</strong></td>
</tr>
</tbody>
</table>

Infant mortality: infant deaths per 1,000 live births
Child mortality: number of deaths among children less than 5 years of age per 1,000 children of the same age range
Maternal mortality: number of maternal deaths per 100,000 live births

II. CITY STRATEGIES TO PROMOTE HEALTH

To promote efficient delivery of health services, the Lapu-lapu CHO employed the following strategies:

1. Regular barangay visitation and assembly

When the city health officer assumed office in 1989, he toured all the barangays for one month to know the people’s health needs and identify ways of improving their access to health and sanitation. He traced the low EPI performance to the absence of a specific schedule for immunization and the people’s lack of interest or awareness. Access to other health services has also been limited since doctors did not have a fixed schedule of visits to the barangays. The city health officer therefore set a permanent schedule for EPI every week and ensured that a doctor will visit a barangay at least once a month on a specific date. During that time, there were only two doctors. At present, there are 10 doctors, each of whom is assigned to four barangays. As the city health officer went around the barangays, he encouraged the people to go to the health centers. Currently, the city health officer goes to the barangays three to four times a week to check on the status of programs being implemented. The mayor also visits the barangays with him about three to four times a month.

Every quarter, the CHO conducts barangay assembly to present the current health programs and projects initiated by the government and to solicit from the community their health problems and priorities. The community also participates in coming up with solutions to address their problems.

2. Regular interaction with officials, concerned groups, and staff

Aside from submitting reports, the city health officer gives feedback to the mayor every morning concerning the past day’s activities. He also joins ABC (Association of Barangay Captains) meetings which are held once a month. During the meetings with the mayor and barangay officials, the city health officer is able to promote health concerns, such as the importance of having a BHS in every barangay. In 1989, there were only five barangay health centers/stations. Currently, there are 41 BHCs/BHSs for the city’s 30 barangays.

Recognizing the usefulness of an integrated approach in addressing needs, the city health officer formed an inter-agency committee composed of government, non-government, civic and religious groups. The committee meets every first Thursday of the month to discuss health, education, and social welfare issues and concerns. One example wherein the involvement of the religious sector proved beneficial relates to the tetanus toxoid controversy. A parish priest opposed the immunization of pregnant women with tetanus toxoid because of the notion that it causes abortion. The committee’s religious sector member proved helpful in convincing the parish priest on the effectiveness of
tetanus toxoid as a preventive medicine and correcting the misconception that it is for birth control.

Every Monday, the CHO conducts staff meetings of all health personnel to discuss issues and concerns related to delivery of health services as well as CHO operations. In addition, there is also a monthly meeting per district among the health personnel and workers. The meetings provide a venue for identifying problems and solutions, and other strategies for further improving performance in the health sector.

3. Adopt-a-barangay program for private companies

Under this program, private companies and educational institutions adopt barangays which they assist on health needs. They help through their doctors (retainers) who conduct regular monthly free clinic in the adopted barangays and through donating facilities or supplies such as used toilets. At present, ten private companies and five educational institutions have adopted eight barangays. To sustain good environment, they also planted trees to maintain the greener areas of the adopted barangays.

Private companies and congressmen also contribute for the milk feeding of preschoolers and Grade 1 pupils while a food manufacturer regularly gives noodles for children’s feeding. One company even handled fogging activities for the entire Lapu-lapu City.

4. Mobilization of private medical practitioners and other groups

For the immunization program, the CHO has involved 50 private medical practitioners from the Mactan Doctors Organization, a civic organization, and nurse-volunteers from the Mactan Community Hospital. It provides vaccines for the group during their collaborated immunization program. Moreover, it also requests the group to set aside time for rendering free services to the barangays. Currently, 50 doctors and 100 nurse-volunteers give free services to the barangay people.

Hilots and midwives who are private practitioners are considered as part of city health even if the government does not pay them. The CHO gives them trainings and asks them to participate in meetings so they could enhance their skills and service to their clients. Hilots and Trained Birth Attendants (TBAs) are required to report to the CHO every last Monday of the month to discuss health issues and concerns.

To get the participation of club owners and managers in monitoring club workers, the CHO organized the LACOMA (Lapu-lapu City Club Owners and Managers Association). The club owners and managers are given the responsibility for ensuring that their workers undergo hygiene check-up every week and conduct peer counseling sessions in STD/HIV/MDS (Sexually Transmitted Diseases/Human Immunodeficiency Virus/Monitoring, Detection, and Surveillance), fertility and control.
The CHO also formed ‘mothers support groups’ to assist the health workers. The mothers do IEC (information, education, communication) dissemination in their respective barangays. They help health personnel during advocacy activities, such as feeding the children during the nutrition month. The mothers support groups currently have 410 members.

5. Funding from the barangays

The allowances for barangay health workers (BHWs) come from the barangays. This arrangement encourages greater involvement of the barangay officials in health matters and in monitoring the activities of the BHWs. Depending on the barangay budget, the allowances range from P400 to P1,500 per month. On the part of the city, it provides free hospitalization to the BHWs and their families.

6. Use of biological toilet for barangays with water shortage

Lapu-lapu City has nine biological toilets in two barangays. These toilets are useful in areas with scarcity of water. Instead of utilizing water for waste disposal, ash is used to cover the waste. The toilets are made of hollow blocks and cement. Galvanized iron is installed to facilitate the drying up of the waste matter by the heat of the sun. The dried waste matter has been tested to be free of coliform and is used as fertilizer after one year. A biological toilet cost P10,000 and is good for 5 to 10 households.

III. KEY ELEMENTS FOR SUCCESS

1. Leadership and initiative of the city health officer

The city health officer made extra effort to know the people’s health needs by going to the barangays regularly. Looking into the causes of Lapu-lapu City’s low performance in EPI, he implemented corrective measures which helped turn the city from the second lowest performer in 1989 to the most accelerated city in EPI implementation in 1991. The solutions were quite simple: fixing a schedule for EPI, encouraging the people to go to the BHSs, and ensuring that there are health personnel who will attend to them. He initiated the organization of an inter-agency committee to discuss health and other concerns and instituted regular meetings among health personnel and workers. His regular presence and actual monitoring of activities in the barangays encourage health personnel and workers to do their tasks well.
2. Interaction with the mayor and barangay captains

The city health officer was able to push for health concerns in his interactions with the mayor and the barangay captains. He always stresses that they should prioritize health inasmuch as their constituents will not be productive if they are not healthy. By communicating to the city/barangay leaders the health problems and needs in the barangays, he was able to get financing for the construction of barangay health stations and also funds from the barangays for the health workers’ allowances.

3. Good networking, proper linkages and coordination

Through networking and identification of specific ways private companies, medical practitioners, and mothers can assist in health service delivery, the CHO was able to get the involvement and support of these groups.

IV. STRATEGIES THAT CAN BE REPLICATED

Lapu-lapu City’s health promoting strategies that other cities may replicate are as follows:

1. Regular barangay visitation and assembly

The city health officer can schedule regular visits to the barangays to see actual implementation of health activities and to interact with the people concerning their health needs and problems. He can also conduct barangay assembly every quarter to present health programs and projects and discuss with the community its health priorities, problems, and solutions.

2. Interaction with city/barangay officials, concerned groups, and staff

In addition to submission of reports, dialogue or meeting with the mayor may be done regularly. To interact with barangay captains and promote health concerns, the city health officer can also attend ABC meetings. An inter-agency committee may also be formed to discuss health and other concerns. Regular meetings (e.g., monthly or weekly) among the health personnel/workers may be conducted as part of the planning, monitoring and evaluation process.

3. Adopt-a-barangay program for private companies

Similar to Lapu-lapu City, other cities could also ask private companies to adopt barangays. The city health officer may present the needs of the barangays and identify
the specific assistance the companies could provide, such as holding of regular free clinic by their doctors, milk or food contributions to the nutrition program.

4. Mobilization of private practitioners and mothers

The CHO may request private practitioners (doctors, nurses, midwives) in the barangays to render free services regularly, e.g., once or twice a month. The barangay health workers could identify the private practitioners who may be able to give such services.

Health personnel could organize mother support groups in cities where these are non-existent. Following organization, CHO resource persons can train mothers on health and sanitation concerns and identify specific ways they can assist in health service delivery.

5. Barangay funding

Just like in Lapu-lapu City, the barangays could provide the allowances for barangay health workers. The amount may vary for each barangay depending on their financial capability. If the barangays can afford it, the allowance may be standardized.

6. Biological toilets

Cities that lack water or would like to save on water can try using biological toilets. They can request Norfil Foundation, a non-government organization which handled the setting up of biological toilets in Lapu-lapu City, to construct biological toilets for them or to teach how these are made and maintained.

V. CONCLUDING REMARKS

Having been awarded as the most accelerated city in EPI implementation in 1991, Lapu-lapu City is a good example to follow for low-ranking performers in EPI. Like the former, they could examine the causes of their low performance and apply corrective measures. In the case of Lapu-lapu City, it fixed a regular schedule for EPI and the doctors’ visits and encouraged the people to go to the barangay health stations. Causes of low performance may differ but the first step is to identify them so that appropriate actions can be taken.

Similar to Lapu-lapu City, health officers in other cities and LGUs could achieve efficient and effective delivery of health services at minimum cost by knowing the people’s needs through interaction with them, communicating these needs to concerned city and barangay officials, and mobilizing various groups to provide material and manpower resources.