Implementation of Extension Project of Radiologic Technology Department in one Barangay of San Jose, Batangas, Philippines

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Date Received: May 19, 2016; Date Revised: July 2, 2016

Abstract - This is an evaluation of the implementation of the community extension service rendered by faculty and students of the Radiologic Technology program with an end view of using the results to enhance the extension program of the department. Respondents were community beneficiaries of the adopted barangay for the past four years from Don Luis, San Jose, Batangas, Philippines. Research design was descriptive, data of which were treated using frequency and weighted mean. University assessment questionnaire on extension services is the instrument used in the study.

Results revealed that community beneficiaries gave very positive assessments on the services of the department considering needs assessment, capability of trainers, quality of topic presentations and the assessment on teachers and faculty as they rendered the services.

Recommendations included provision of wider venue and reaching out to more beneficiaries by wider information dissemination and that strategic planning activities for the community extension program be mapped to address some activities which may sustain the program.

Also, tie–up with other linkages may be done so that after finding the deficiencies of the beneficiaries they may be provided health and medical interventions.

Keywords: evaluation, community extension project

INTRODUCTION

Social responsibility is being taught in institutions of higher learning through involving the students in community extension projects as part of the tri-fold function of their respective colleges apart from research and instruction [1], [2]. Lyceum of the Philippines University guided by its credo, Pro Deo et Patria, (For God and Country) and the mandates of the Commission of Higher Education (CHED) leads its strong efforts in instruction and research, vis-s-vis reach out communities as a way of sharing University resources and expertise specifically to the underserved and depressed communities. This mission is to uplift the lives of people in the adapted community of the university and teach the students realize the value of volunteerism and its underlying spirit in fulfilling the needs of others [1].

In the study of Borbon [3], she disclosed that LPU Batangas is effective in inculcating the vision, mission and objective of its Community Extension Programs to its beneficiaries. The community has experienced the impact of the programs in terms of acceptability, though their perception of sustainability is dependent on the program level of implementation. There was a significant relationship between the status and impact of the community extension programs in literacy, health and peace and order with regards to acceptability and sustainability. However, it was assessed that the programs were less implemented and therefore, need to be reinforced; thus, a follow up study on other colleges may also be done. In the desire to ensure a better service to the community that needs assessment, a systematic process for determining and addressing needs between the current and the desired conditions is a must. The discrepancy between these identified conditions must be measured to appropriately determine the need to improve current situation or to heal some weaknesses or deficiency.

The Radiologic Technology Program under the umbrella of the College of Allied Medical Professions has for its own does not only aim to produce quality graduates but also works out that its faculty and students use their gained knowledge and put it into
productive use. Community extension therefore becomes a social function of everyone so as the values caring and collaborating experiences are inculcated [4].

Parallel to the need of the Radiologic Technology to have an impact to the community; it has to do an assessment to its adopted barangay, a depressed area in Barangay Don Luis, San Jose, Batangas adjacent to the local cemetery where majority of residents are squatters whose work are mostly cemetery caretakers, others are jobless with life style of drinking, smoking contributory to risk factors in developing pulmonary problems. As this research is an evaluation of the three-year implementation (AY 2011-2014) of the community extension services rendered by Radiologic technology program; it is the intention of the researchers to use the results in improving the community extension program of the department.

**OBJECTIVES OF THE STUDY**

The purpose of this study was to evaluate the Community Extension Project of the LPU Radiologic Technology Program in Barangay Don Luis, San Jose, Batangas from 2011 to 2014: Basis for Program Enhancement.

More specifically, it presented the profile of the community beneficiaries in terms of age, educational attainment, their chest result examination, the common pathologic conditions of the community residents, determine their evaluation on this community extension program; and to better enhance Radiologic Technology services to the residents of Don Luis, San Jose, Batangas, Philippines.

**REVIEW OF LITERATURE**

Community extension is an expression of a deep sense of commitment of the people involved in the academe. Academic people are more aware and more socially skilled than the other sectors in the community. In other universities like La Salle, their Community Extension Services (CES) is a component of their development framework which conveys its commitment to service, and is driven by humanitarian and Christian ideals. It is providing service to peoples, groups, and communities inside and outside the University [5].

Lyceum of the Philippines University-Batangas and partners respond to social problems hope to make any demonstrable difference. Measurement results of community development interventions are very significant for both the school and the beneficiaries since it will indicate growth or negative results [6]. LPU-Batangas is a learning institution which has an integrated educational institution namely: instruction, research and community extensions are linked harmoniously to produce meaningful learning [7], [8], [9]. The institutions together with the different academic departments, students, and faculty and staff organizations have been involved in providing community extension to the community. Developing a community with greatest necessity to get some assistance from different agencies like academic institutions is an act of fulfilling the mission of helping people to uplift not only the standards of living of those deprived but it would also provide greater impact to the character and values of the students and employees who take part on this worthy undertaking.

In the study conducted by Laguador and Camello [1] on the Community extension services for the residents of barangay Wawa Batangas City, they discovered that LIMA community extension programs are well implemented, and it is recommended that the activities may be well-practiced in order to have a hygienic society and to make their community into a high level of cleanliness and orderliness in assistance to the benefactor and for the improvement of the community. This research is an avenue to understand that social responsibility is being taught in institutions of higher learning through involving the students in community extension projects as part of the trifold function of their respective colleges or universities aside from research and instruction. The goal of this community extension programs is to uplift the lives of people in the adopted community of the university and teach the students to realize the value of volunteerism and its underlying spirit in fulfilling their needs [2].

Indeed, students must learn to collaborate with the team and show proper care and respect to each member in order to tighten the connection between the members of the community and appreciate the value of every single contribution of each individual in a team [10].

In another study conducted by Dilao [11], she presents the beneficiaries’ views towards community extension, their reasons for participating, their perceived effects of the program to their as clienteles, and LSU’s programs have improved the lives of the residents in the partner community. It brought remarkable impact such as: on elevating their income and developing their self-confidence.
The study of Galve and Subong [12] revealed that from the small capital initiated during the start of the project, the income gained continually grew and reached its peak, it is recommended that the project should have its annual monitoring to generate more data for a comparative analysis.

Student involvement in community projects may lead to visible results in the community [13]. For administrators of educational institutions, service is a way to improve relationships between campus and community. Service to the community is a way for campuses to address public perception that higher education exists for its own good [14].

Some literatures were reviewed which focused on the essentials of community extension. Teklehaimanot [15] conducted a case study on human resource development for a community, based health extension program in Ethiopia. In 2004, the government introduced the Health Extension Program (HEP), a primary care delivery strategy, to address the challenges and achieve the World Health Organization Millennium Development Goals (MDGs) within a context of limited resources.

**METHODS**

The researchers used the descriptive survey method. The target participants are the residents of Don Luis who are beneficiaries of the Radiologic program. From 2011 to 2014, there is a total of 104 beneficiaries of Radiologic Technology community extension programs in Barangay Don Luis, San Jose Batangas. A 100% target was used thru the help of the Barangay Captain.

This study utilized the University questionnaire on assessment of extension services. This covered questions on conduct of needs assessment and project implementation. The questionnaire likewise included recommendations for enhancement of the program and possible areas which need to be improved.

To determine the responses, the items were given scale values of 1-4 with 4 as highest and 1 as lowest. The scale continuum used as reference was as follows: 3.5 -4: Always; 2.5 -3.49: Often; 1.5 -2.49: Sometimes; 1.0 -1.49: Never.

The items were also explained thoroughly in Tagalog to ensure that the respondents may provide substantial answers.

**Procedure**

The X-Ray Technology Department scheduled the date of community extension service and then collaborated with the barangay officials to formalize the activity. Pre-announcement was then made to give residents information of the health teaching and x-ray examination that would be conducted in the place. The beneficiaries were identified particularly those who had been treated for the past 2 years and needs immediate service. The faculty members personally handed the questionnaire and do focus group interview to the beneficiaries.

**Data Analysis**

The data gathered were presented in tabular form to interpret the result and descriptive statistics such as frequency distribution and weighted mean. Frequency distribution and weighted mean were utilized to determine the degree of importance of the community extension program provided by College of Radiologic Technology. This research employed various non-parametric tools such as frequency, percentage and weighted mean.

**RESULTS AND DISCUSSION**

This section provides data and insights relevant to the aim of enhancing the community services of the Radiology Technology Department of the LPU-B.

Table 1 below presents the beneficiaries of Radiologic technology community extension program. From a total of 108 respondents –beneficiaries 10 or 9.25 percent are college level, 70 or 64.81% High School graduate and 25.93 or 28 of them are Elementary graduate.

As to age, most of the respondents or half of them with 60 or 55.56% belongs to age 20 and below, followed by 21-30 with 35 or 32.41, least respondents belong to ages 31-40 and above 40 with 6 and 7 or 6.49 and 5.56 respectively.

Demographics show that regardless of educational attainment and age, this program is available as long as they are submitting to the protocols of the activities.

As to the common pathologic conditions affecting the residents’ respiratory system and the presence of pulmonary diseases, the initial survey showed as based from x-ray results that 12 or 11.11% residents were found positive for pulmonary tuberculosis, 18 or 16.67% had suffered pneumonia, 5 or 4.63 had spinal deformity, and 2 or 1.85 suffered from increased cardiac size. It was found out that 71 or 65.74 do not suffer from pathological health conditions.
Table 1. Frequency Distribution of Respondents According to Educational Attainment and Profile

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Graduate</td>
<td>28</td>
<td>25.92</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>70</td>
<td>64.81</td>
</tr>
<tr>
<td>College Graduate</td>
<td>10</td>
<td>9.25</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100</td>
</tr>
</tbody>
</table>

**Age**

<table>
<thead>
<tr>
<th>Age</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 and Below</td>
<td>60</td>
<td>55.56</td>
</tr>
<tr>
<td>21 – 30</td>
<td>35</td>
<td>32.41</td>
</tr>
<tr>
<td>31 – 40</td>
<td>6</td>
<td>5.56</td>
</tr>
<tr>
<td>Above 40</td>
<td>7</td>
<td>6.49</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100</td>
</tr>
</tbody>
</table>

**Pathological Conditions**

<table>
<thead>
<tr>
<th>Condition</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive pulmonary tuberculosis</td>
<td>12</td>
<td>11.11</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>18</td>
<td>16.67</td>
</tr>
<tr>
<td>Spinal deformity</td>
<td>2</td>
<td>1.85</td>
</tr>
<tr>
<td>Non-Pathological health condition</td>
<td>77</td>
<td>65.74</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100</td>
</tr>
</tbody>
</table>

For those found with pulmonary tuberculosis, they were endorsed to the DOTS to be able to avail of medications. They were asked for a follow-up check-up after six months to find out if there will be improvement after taking the medications. From this results, that the extension service was sustained for AY 2012-2014 with health teaching conducted by faculty and representative of each college levels in collaboration with barangay officials.

This holds true among faculty, service to the community which is their way to apply theory and knowledge to local problems. In an interview among administrators of educational institutions, they mentioned that community service is a way to improve relationships between campus and community and later address public perception that higher education exists not only for their own good but for the common good of the community [14], [16].

The results indicate the need to encourage more beneficiaries for sustainability of the program. According to interviewed residents, some possible reasons for the drop off with other to the extension programs could have been the preference of the residents to go on with their work where they would earn as they need it for their family. This data is very important for LPU- Radiologic Technology to formulate programs relative to the need of the community with assurance of 100% participation among community beneficiaries.

Data from the table show the assessments of the respondents on the three-year implementation of the community extension services of the Radiology Department of the LPU-B in Barangay Don Luis, San Jose Batangas.

Table 2. Evaluation of the Community Extension Program of the Radiology Technology Department (2011-2014)

<table>
<thead>
<tr>
<th>Community Extension programs</th>
<th>2011-2012</th>
<th>2012-2013</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>WM VI</td>
<td>3.78 A</td>
<td>3.93 A</td>
<td>3.85 A</td>
</tr>
<tr>
<td>1. The needs of the community are considered</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The projects are implemented as scheduled</td>
<td>3.72 A</td>
<td>3.93 A</td>
<td>3.82 A</td>
</tr>
<tr>
<td>3. The projects are accepted by the community</td>
<td>3.83 A</td>
<td>4.00 A</td>
<td>3.91 A</td>
</tr>
<tr>
<td>4. The speakers/trainers show mastery of subject matter</td>
<td>3.33 O</td>
<td>4.00 A</td>
<td>3.86 A</td>
</tr>
<tr>
<td>5. The presentation of subject matter is clear</td>
<td>3.33 O</td>
<td>4.00 A</td>
<td>3.86 A</td>
</tr>
<tr>
<td>6. There is a coordination with the recipients of the program</td>
<td>3.78 A</td>
<td>4.00 A</td>
<td>3.89 A</td>
</tr>
<tr>
<td>7. The beneficiaries are identified by the project/training implementers</td>
<td>3.72 A</td>
<td>4.00 A</td>
<td>3.86 A</td>
</tr>
<tr>
<td>8. The teachers accommodating.</td>
<td>3.72 A</td>
<td>4.00 A</td>
<td>3.86 A</td>
</tr>
<tr>
<td>9. The students are accommodating.</td>
<td>3.50 A</td>
<td>4.00 A</td>
<td>3.75 A</td>
</tr>
<tr>
<td>10. There are sufficient facilities for the ComEX program</td>
<td>3.70 A</td>
<td>4.00 A</td>
<td>3.50 A</td>
</tr>
<tr>
<td>Composite Mean</td>
<td>3.63 A</td>
<td>4.00 A</td>
<td>3.85 A</td>
</tr>
</tbody>
</table>
by the response that the extension program prior to its
cost in the barangay first looked into the needs of
the community, weighted mean of 3.78. There was
also the thinking that there was coordination with
recipients of the project, weighted mean of 3.78.
Lowest weighted mean was on the mastery of the
subject matter of the trainers and clarity of
presentation of the topic, 3.33.

Similarly, the respondents gave high assessments
on the implementation of the community extension
services of the Radiology Technology Department of
the LPU-B. Of the items, highest assessment was
given in almost all of the items considering
acceptability of the program, speaker’s / trainer’s
mastery of subject matter, clarity of presentation of
topic, coordination with recipients of the project,
identification of beneficiaries and attitude of trainers
and students which gained similar weighted mean of 4.
Similar weighted mean of 3.93 was on
implementation of project as scheduled and conduct of
needs assessment.

The overall assessment of the respondents showed
that from among the program items, the highest
weighted mean was 3.91 on the acceptability of the
program and coordination with the recipients of the
program, weighted mean of 3.89, lowest weighted
mean was 3.75 on students being accommodating.
This is a strong manifestation on how the Radiological
Technology department handling community
extension is very serious and in close coordination
with the Barangay beneficiaries.

Confirming the results of Laguador, Mandigma
and Agena [2], Higher Education Institutions’ social
responsibility is really involving the students in
community extension projects as part of the trifold
function of their respective colleges or universities. As
the goal of this community extension programs is to
uplift the lives of people in the adapted community of
the university and teach the students to the value of
volunteerism, this extension program of Radiologic
Technology is really successful.

Further results suggest that there was wide
acceptance among the respondents on the community
extension service of the department. Given this
premise, there is possibility that the program may be
sustained provided that the department oversees that
the services extended as productive and helpful to the
community. This study also suggested that the
extension service may find support among local
officials because the program prior to its
implementation has been coordinated with the
barangay officials and the recipients. Therefore,
whatever help is needed may be provided by the
government agencies.

For instance, as shown in the study, residents
found positive with pulmonary tuberculosis were
referred to the DOTS for treatment. In this way, there
is partnership between the University and the
government and residents and beneficiaries are better
served. However, it was found that the beneficiaries
gave least assessment on capability of the trainers and
the students’ being accommodating. These need to be
addressed as these are the most important resources in
an extension project. Trainers need to be able to
communicate to the grassroots level of the
beneficiaries. This means going to the level of
ordinary folks when explaining the health teaching to
the beneficiaries. Also, the students should also be
taught how to deal with ordinary people. The
beneficiaries may not be as pleasant in terms of
personality, attitudes and well-being as they come
from an underserved community but students, should
be able to practice appropriate public human relations
in order to get the cooperation of the beneficiaries.

According to the students, their experience in
community service provided them insights and
knowledge in terms of the radiologic procedures and
their relationship with patients. Part of their
realization was that they should have the
competencies to handle mobile x-ray equipment and
know the proper radiologic procedures. This
community extension project is one way of exposure
where they will be able to put to use the theories and
skills developed in school.

On the other hand, the community extension
service taught them lessons of volunteerism and as
students, they will be able to deal with patients which
is important in their future field of work. They would
be more knowledgeable on how to explain the needed
cooperation when patients are subjected to radiologic
procedures. Likewise, they would be exposed to
different people of different views and status and be
able to reach out to them so that residents may
continue to participate in community programs.

Therefore, student involvement in community
projects may lead to visible results in the community.
Henness [13] found that community impacts of
service-learning were related to achieving goals of
community development. Service-learning and
volunteerism are of benefit to students for career
preparation, awareness of community problems, and
the connection of theory to practice.
Table 4. Suggested Activities to Help Improve Community Extension Project

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The activity should be conducted in areas with more households</td>
<td>to accommodate more participants in the project.</td>
</tr>
<tr>
<td></td>
<td>to accommodate more participants in the project.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The project should be implemented on the given time.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>The extensionists should know how to deal with the beneficiaries.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>There should be an area where extensionists can explain the</td>
<td>activities of the project.</td>
</tr>
<tr>
<td></td>
<td>activities of the project.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>More activities may be included in this project.</td>
<td></td>
</tr>
</tbody>
</table>

The researchers asked beneficiaries on the possible activities that may be done to improve the implementation of the extension project. The beneficiaries suggested on the conduct of the activities in a wider place so that more beneficiaries may be accommodated. This indicates that beneficiaries realize the importance of the health teachings and the x-ray service rendered to the people and therefore want that there be more beneficiaries to benefit from the program.

Moreover, the beneficiaries suggested that the extension activity be done on time and services be delivered punctually. For the beneficiaries, time is very important as they need to earn for the family. Spending time listening to and health teaching although important is not as important when it comes to earning money for the family as respondents claimed.

They also suggested that the department needs to review the program so that varied activities and health teachings may be shared to the beneficiaries. Routine and repetitive activities may lessen the participation of beneficiaries as they may think that they will hear the same teaching year after year; they may find the project not interesting anymore.

CONCLUSIONS AND RECOMMENDATIONS

The community extension service of the Radiology Technology Department has gained a higher number of beneficiaries as compared to the second year of implementation. According to beneficiaries, the extension service of the department is widely acceptable and properly coordinated with the local authorities. The community extension service provides students with exposure in radiologic technology procedures and in dealing with common folks from the grassroots level.

It is recommended that strategic planning activities for the community extension program be mapped to address some activities which may sustain the program. That tie-up with other linkages be done so that after finding the deficiencies of the beneficiaries. They may be provided health and medical interventions. Beneficiaries recommend that the community extension service be conducted in wider place to accommodate more beneficiaries and that other health teachings be extended to make the program sustainable.

REFERENCES


