

Evaluation of the Effectiveness of Community Involvement Program of Education and Nursing Students

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ABSTRACT

The college department conducted this research study to evaluate the effectiveness of the community involvement program (CIP) in terms of health, literacy, and numeracy services rendered by nursing and education students in Matangtubig from 2015-2020. The study utilized participatory research. It involves stakeholders in Barangay Matangtubig in community projects, evaluating, collecting, and analyzing data. The information taken will be utilized to adjust and improve the project. The study explored the experience of Barangay Matangtubig residents in terms of health care and tutorial services rendered by the college students at a private school, specifically the Bachelor of Science in Nursing (BSN) and Education. It investigated the participants' experience with the health care services delivered regarding maternal and child health care, health education, nutrition, environmental sanitation of the community, and education regarding reading, writing, and numeracy services. The results of the study provided baseline information for policymakers in designing programs, setting standards, and taking necessary actions. The study revealed that people in the community must assume personal responsibility to become self-reliant. The

presence of the nursing and education students was meant only to facilitate and help the residents.

Keywords — participatory evaluation model, extension services, organizational learning, stakeholders

INTRODUCTION

Community-based research is an important component of the community engagement movement. Developing an increased awareness of the community residents can facilitate their engagement and cooperation, especially in participation in any community projects and their evaluation for further future improvement. The practical challenges of conducting research with the community based on goals and timeframes, minimal resources, a lack of personal investment, and methodological challenges associated with recruiting participants were the challenges encountered by Stocking and Cutforth (2006), Strand et al. (2003), and Peresie et al., (2003) in their conduct of community-based research as cited by Puma et al. (2009) in his engagement with Colorado Refugee Services Program.

Based on the local community of Matangtubig, one of the barangays in the municipality of Baliuag located in Bulacan was chosen as the adopted community of St. Mary's College of Baliuag in 2015. As reported by Census done in 2020, about 3,332 or 1.98% represents the total population of Baliuag. At the same time, the 2015 Census reported that the age group with the highest population in the barangay is about 5 to 9, with 286 individuals. The computed Age Dependency Ratio means that there are 48 youth dependents for every 100 working-age population and five (5) elderly persons for every 100 working individuals in the population. It is noted that 53 dependents may be either young or old for every 100 working population. The population in Matangtubig grew drastically from only 978 in 1990, then increased to 3,332 in 2020, which means an increase of 2,354 within 30 years. The barangay is a young community where half of the entire population is under 25, and the other half is over 25. The latest census done in 2020 reported a growth rate of 5.11%, with around 702 people added from the previous census in 2015 of only 2,630 people (PhilAtlas, n.d.).

According to the author, performance is of great importance for any Catholic institution to maintain its competency standards based on the principles of local and international accreditation organizations. The International Organization

for Standardization (ISO) and Philippine Accrediting Association of Schools, Colleges, and Universities (PAASCU) accredited St. Mary's College of Baliuag (SMCB). This means that the institution must evaluate its major programs, especially community involvement, as it is one of the pillars of Higher Education Institutions (HEIs), together with curriculum and research. She further stated that the most fitting and appropriate systematic inquiry in evaluating the community utilized by the author is Evaluation Research to get an accurate assessment and appraisal of Barangay Matangtubig in terms of the community involvement program (CIP) of SMCB to Matangtubig. Its purpose is to provide information that will be used in decision-making. Further, evaluation is the process by which the effectiveness of health services rendered by the nursing and education students to the residents was assessed in terms of health education, maternal and child health care nutrition, values formation, and literacy and numeracy programs. These were documented for accreditation purposes and for rendering humanitarian services.

Participatory Action Research (PAR), which was used in the study, involves passing judgment on the extent to which the programs can be considered a "success." The combined monitoring and evaluation process provides the necessary data to guide strategic planning, design and implements programs and projects, and allocate and re-allocate resources in better ways. Participatory action research is intended to study and change a particular community, neighborhood, school, organization, group, or team (Participatory Methods, n.d.).

Thus, through the community involvement program of the school, Barangay Matangtubig underwent changes in terms of education, co-responsibility in communal improvement, and the development of leadership skills among the residents. According to Benjamin-Thomas et al. (2018), "participation" is a process of involvement of community members varying from full participation to simply passive participation in community activities and events. Similarly, "concrete action" is derived from the result of research with implications for change in the policy and practice of the school. This happens only when there is the meaningful involvement of community members in facilitating social change.

The principles and characteristics of participatory action research, such as being collaborative, cooperative, critical, reflexive, transformative, capacity-building, and empowered, have been discussed by numerous scholars (Altrichter et al., 2000; Baum et al., 2006; Blair & Minkler, 2009; Cargo & Mercer, 2008; Grimwood, 2015; Kemmis, 2006; MacDonald, 2012; McTaggart, 1991; Minkler, 2000).

OBJECTIVES OF THE STUDY

This study aimed to evaluate the effectiveness of the community involvement program (CIP) in terms of health, literacy, and numeracy services rendered by the BSN and Education students in Matangtubig from 2015-2020. Specifically, the study aimed the following objectives (1) to determine how the residents assess the health care and educational services rendered to them by the college students in terms of maternal and child health care, health education, environmental sanitation, nutrition, as well as literacy and numeracy and (2) to determine the improvement of the skills, knowledge, or attitudes of the residents resulting from the health, reading, and numeracy programs, and values formation given by the students.

METHODOLOGY

Research Design

The research design employed in this study is participatory action research by utilizing its techniques and approaches in qualitative research. This design involves the direct collaboration of researchers and stakeholders affected by the social issues being studied to bring about positive action that will result in a positive change. This research method involves working with the research participants to collect data, analyze it, and make recommendations.

Research Site

The research was done in Barangay Matangtubig, located in Baliuag Bulacan, as the adopted community of the school and the focal site for all the community involvement projects for both the Integrated Basic Education and College Departments for the past five (5) years.

Participants

The participants were the residents of the barangay who benefited from the literacy and health services rendered by the college education and nursing students from 2015 until 2020.

Instrumentation

The research tool administered to the residents was the researcher's self-made questionnaire written in vernacular for optimum understanding of the selected

respondents of the study. Filipino major teachers validated of the researcher-made questionnaire written in the Filipino language for language accuracy based on the level of understanding of the respondents.

The questionnaire is composed of 50 items on a Likert scale from 5 (Very big Help), 4 (Big Help), 3 (Enough Help), 2 (Small Help), 1 (No Help). The tool is divided into 3 parts. Part I is about the Personal Information of the respondents. Part II are questions referring to the nursing students' services regarding (a) health education, (b) nutrition, (c) maternal and child care (d) Ignacian values and attitudes. Part III is about the services rendered by the education students on (a) literacy and numeracy program. Part IV has 3 questions referring to general opinions regarding the overall benefits they received from the students; what additional assistance they still need during this last year of community services by the school.

This study employed the participatory evaluation model, which is considered a research-to-action approach, according to Cornwall and Jewkes (1995), and employs the direct participation of everybody in the community, like the citizens, community leaders, constituents, and the beneficiaries of the research process. An original questionnaire of 50 items was constructed, reflecting the essence of PR. The questionnaire was divided into five areas: health education, maternal and child care, nutrition, Ignacian values and attitudes literacy, and numeracy programs. These were evaluated for their effectiveness. Research experts subjected the questionnaire to content and language validity as it was formulated in vernacular.

It utilized people-based inquiry by distributing questionnaires first to the barangay chairman and his council, who, in turn, selected residents such as members of a mother's class and residents who were able to get first-hand feedback from being recipients of community services themselves. Data were collected from the responses of the thirty (30) participants chosen by the Barangay chairman and his council based on being the residents of the Barangay for the past 5 years and were regular recipients of the community involvement services of the nursing and education students.

Ethical Protocol

The researcher followed certain ethical protocols in conducting research in Barangay Matangtubig. A Letter of Permission from the Barangay Chairman was secured. The chairman selected the prospective respondents for the study, followed by an orientation on the objectives of the study, and secured an

agreement of participation. Two respective leaders were assigned to gather all the questionnaires. The nursing community coordinator collected the questionnaires from the leaders and submitted them to the licensed psychometrician of the school to process and tabulate the data. The researcher analyzed, interpreted the data, and prepared the final manuscript, which was submitted to the research coordinator of the school for further comments and suggestions before public presentation.

Table 1. Profile of Respondents According to Gender

Gender	f	%
Male	19	63.33
Female	11	35.67

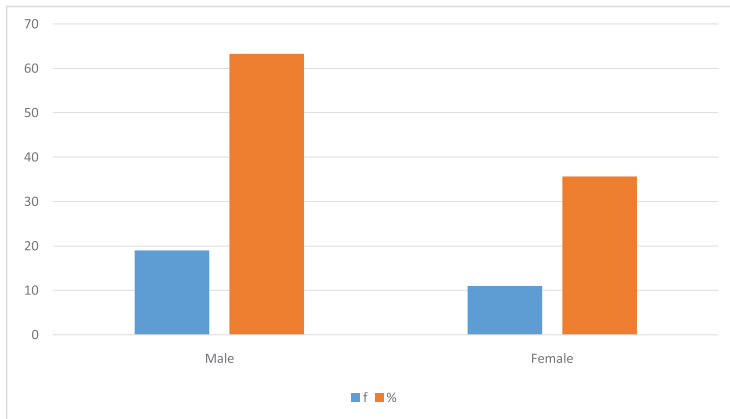


Figure 1. Profile of Respondents According to Gender

Table 1 shows that there were more male respondents (63.33%) than females who comprised 35.67% of the sample.

Table 2. Profile of Respondents According to Age

Age	f	%
20-30 yrs. Old	3	10
31-40 yrs. Old	4	13.33
41-50 yrs. Old	10	33.33
51-60 yrs. Old	6	20.00
61-70 yrs. old	7	23.33

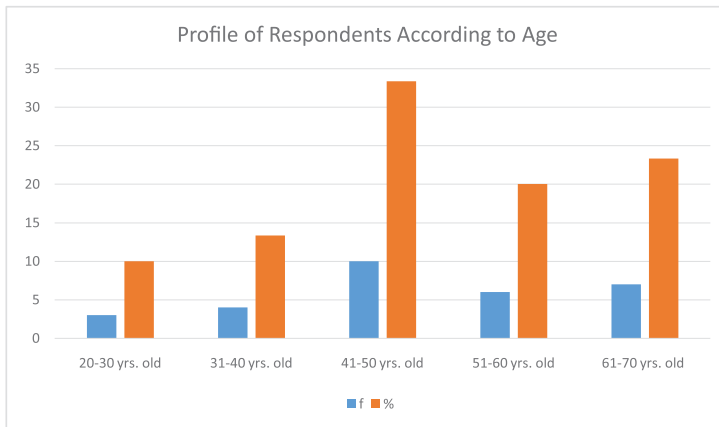


Figure 2. Profile of Respondents According to Age

The majority of the respondents belonged to the 41 to 50-year-old bracket, followed by 61-70 years old (23.33%) and 51-60 years old (20.00%), as seen in Table 2.

Table 3. Profile of Respondents According to Educational Attainment

Educational Level	f	%
Elementary	13	43.33
High School	13	43.33
College	4	13.33

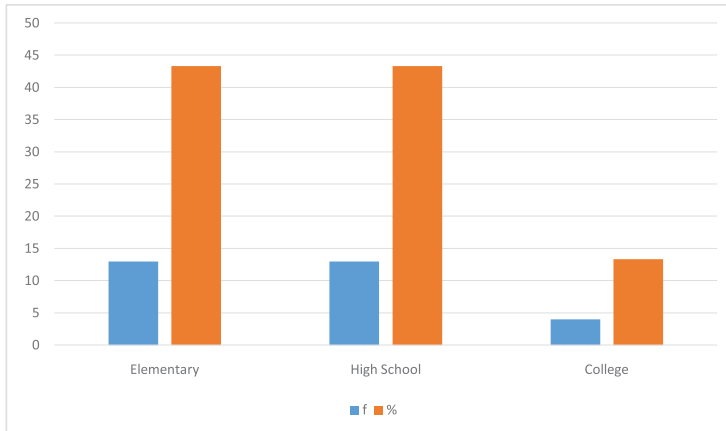


Figure 3. Profile of Respondents According to Educational Attainment

Table 3 shows that in terms of educational attainment, residents who finished elementary and high school education obtained an identical majority share of the sample (43.33%), while only 13.33% were college-educated.

The responses for Tables 4, 5, 6, and 7 were scored and analyzed using a Likert scale. Responses of highly acceptable, acceptable, moderately acceptable, fairly acceptable, and not acceptable were assigned numerical values of 5, 4, 3, 2, and 1, respectively. Averages were then computed for each item and interpreted according to the following categories:

- (4.50-5.00) Highly Acceptable
- (3.50-4.49) Acceptable
- (2.50-3.49) Moderately Acceptable
- (1.50-2.49) Fairly Acceptable
- (1.00-1.49) Not Acceptable

It must be noted that no item was rated 2 (fairly acceptable) or 1 (not acceptable). All items were rated as either 3 (moderately acceptable), 4 (acceptable), or 5 (highly acceptable).

Table 4. Health Education

	5	%	4	%	3	%	Mean	Interpretation
1. I learned many things about health.	14	46.67	16	53.33			4.47	Acceptable
2. I learned to appreciate my health.	14	46.67	16	53.33			4.47	Acceptable
3. I became interested in matters concerning health.	14	46.67	16	53.33			4.47	Acceptable
4. I convinced my neighbors to participate in activities concerning health.	16	53.33	14	46.67			4.53	Highly Acceptable
5. I recognized my role in maintaining environmental sanitation.	14	46.67	15	50.00			4.48	Acceptable
6. I should not rely on others to preserve my health.	13	43.33	17	56.67			4.43	Acceptable
7. I was taught how to prevent myself from getting sick.	13	43.33	17	56.67			4.43	Acceptable
8. I avoided getting sick because of the students' health teachings.	12	40.00	18	60.00			4.40	Acceptable
9. The residents were careful in their waste disposal.	14	46.67	16	53.33			4.47	Acceptable
10. The residents learned to use the toilet properly.	13	43.33	16	53.33	1	3.33	4.33	Acceptable
							4.45	Acceptable

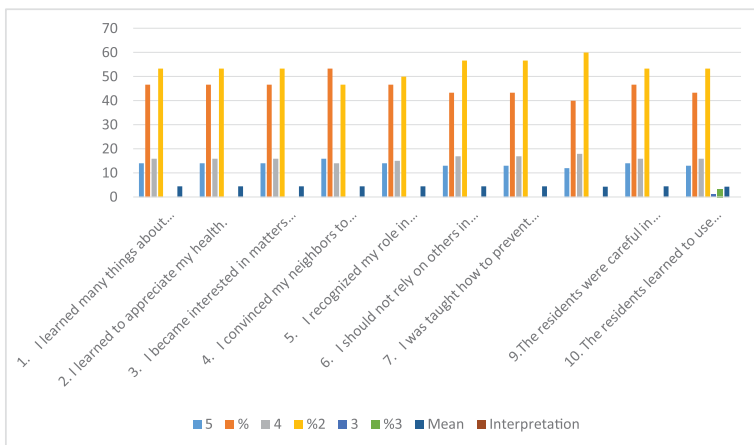


Figure 4. Health Education

Table 4 shows that out of 10 items, only item 4, “I convinced my neighbors to participate in activities concerning health,” was rated “highly acceptable.” The rest were “acceptable.”

Table 5. Nutrition

	5	%	4	%	3	%	Mean	Interpretation
1. I learned about food that is good for the body	13	43.33	17	56.67			4.43	Acceptable
2. I learned about food that is not good for the body	11	36.67	18	60.00			4.38	Acceptable
3. I learned to wash vegetables well before cooking.	12	40.00	17	56.67			4.41	Acceptable
4. I learned about the benefits of vegetables to our bodies	12	40.00	17	56.67			4.41	Acceptable
5. I learned the importance of not using too much salt and seasoning in cooking.	12	40.00	17	56.67			4.41	Acceptable
6. I learned how to feed malnourished children.	13	43.33	16	53.33			4.45	Acceptable
7. I learned about maintaining the proper weight for growing children.	12	40.00	17	56.67			4.41	Acceptable
8. I learned about what mothers should do to keep their children healthy.	18	60.00	12	40.00			4.60	Highly Acceptable
9. I learned the value of washing hands before eating.	12	40.00	13	43.33			4.48	Acceptable
							4.44	Acceptable

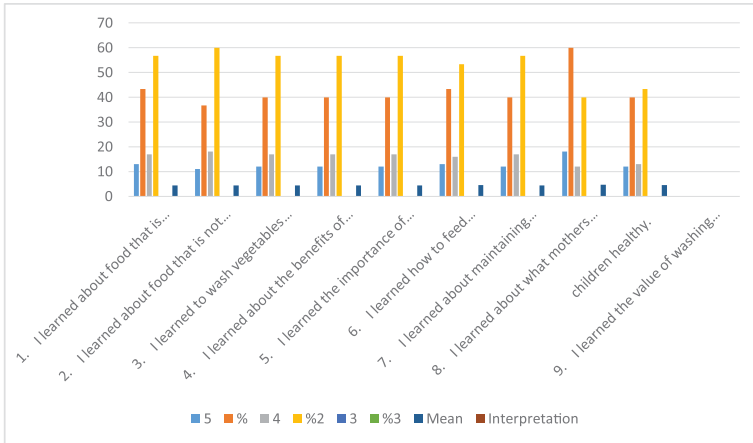


Figure 5. Nutrition

It can be gleaned from Table 5 that 8 items were rated “acceptable,” while item 8 “What mothers should do to keep their children healthy,” obtained a “highly acceptable” rating.

Table 6. Maternal and Child Care

	5	%	4	%	3	%	Mean	Interpretation
1. Teaching mothers what to do when their children have a fever	13	43.33	16	53.33			4.45	Acceptable
2. What mothers should do when pregnant	13	43.33	17	56.67			4.43	Acceptable
3. Importance of regular prenatal check-ups	13	43.33	17	56.67			4.43	Acceptable
4. Food that pregnant women should eat	16	53.33	14	46.67			4.48	Acceptable
5. Food that is not good for a pregnant woman	13	43.33	17	56.67			4.43	Acceptable
6. Proper ways of breastfeeding	14	46.67	15	50.00			4.48	Acceptable
7. Importance of vaccination for children	15	50.00	15	50.00			4.50	Highly Acceptable
8. The proper way of bathing the baby	12	40.00	17	56.67	1	3.33	4.30	Acceptable
9. Food that is good for the children	12	40.00	18	60.00			4.40	Acceptable
10. The proper way of washing the feeding bottles	12	40.00	18	60.00			4.40	Acceptable
							4.43	Acceptable

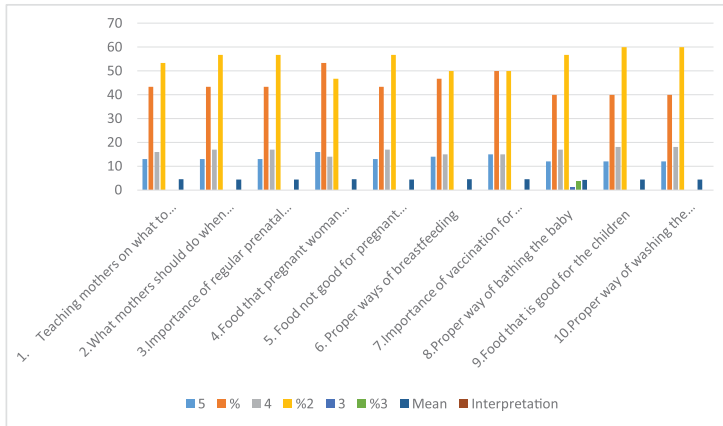


Figure 6. Maternal and Child Care

In Table 6, (9 items) were rated by the respondents as “acceptable,” except for item 7, “Importance of vaccination to children,” which was rated as “highly acceptable.”

Table 7. Ignacian Values and Attitudes

	5	%	4	%	3	Mean	Interpretation	
1. Residents should help one another for the good of the community	11	36.67	17	56.67		4.39	Acceptable	
2. I changed my self-centered because of the teachings of the teachers/ students.	10	33.33	17	56.67		4.37	Acceptable	
3. We were taught to respect one another.	9	30.00	19	63.33		4.32	Acceptable	
4. I learned the importance of prayer.	9	30.00	19	63.33	1	3.33	4.28	Acceptable
5. I learned the significant role of fathers in making a happy family.	9	30.00	20	66.67	1	3.33	4.27	Acceptable
6. Husbands became helpful to their wives.	6	20.00	22	73.33		4.21	Acceptable	
7. Malnourished children were fed.	10	33.33	18	60.00		4.36	Acceptable	
8. The singing and dancing programs gave joy on Christmas.	5	16.67	23	76.67		4.18	Acceptable	
9. We were taught to help one another.	9	30.00	19	63.33		4.32	Acceptable	
10. We were taught the importance of prayer and mass on Sundays.	8	26.67	19	63.33	1	3.33	4.25	Acceptable
						4.29	Acceptable	

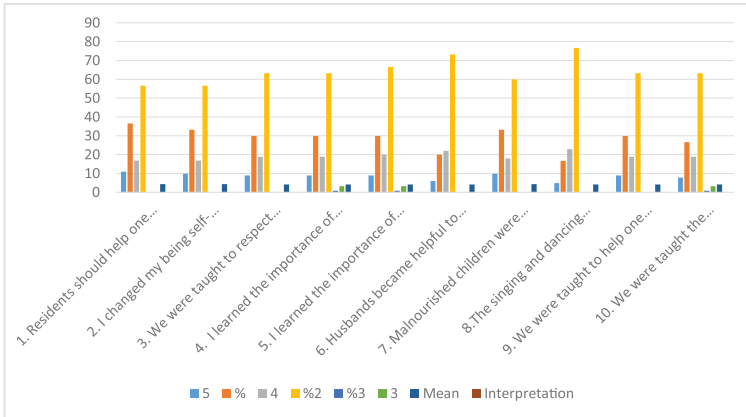


Figure 7. Ignacian Values and Attitudes

Table 7 shows that in terms of the Ignacian values and attitudes learned by the residents from the college students, all 10 items were rated “acceptable.”

The second portion of the questionnaire focused on what the respondents appreciated from the CIP of SMCB, particularly on the health and education services rendered to them. The 30 respondents positively acknowledged these as beneficial contributors to positive life changes. In areas for improvement, the participants suggested implementing income-generating projects that would augment their current meager income and resources.

Table 8. Literacy and Numeracy Program

	5	%	4	%	Mean	Interpretation
1. The children were taught how to write.	8	30.77	18	69.23	4.31	Acceptable
2. The children were taught how to read.	8	30.77	18	69.23	4.31	Acceptable
3. The children were taught good manners and right conduct.	11	42.31	15	57.69	4.42	Acceptable
4. The children were taught the Filipino culture of answering “PO” and “OPO” when talking with the elderly.	13	48.15	14	92.85	4.48	Acceptable
5. The residents learned the value of time because the students always arrived on time.	8	32.00	17	68.00	4.32	Acceptable

6. The children were taught Mathematics.	8	30.77	18	69.23	4.31	Acceptable
7. The mothers were taught the value of disciplining their children.	8	30.77	18	69.23	4.31	Acceptable
8. The children were taught how to read properly.	9	34.62	17	65.38	4.35	Acceptable
9. The children were taught how to count correctly.	7	26.92	19	73.08	4.27	Acceptable
10. The children were taught correct spelling	7	26.92	19	73.08	4.27	Acceptable
					4.33	Acceptable

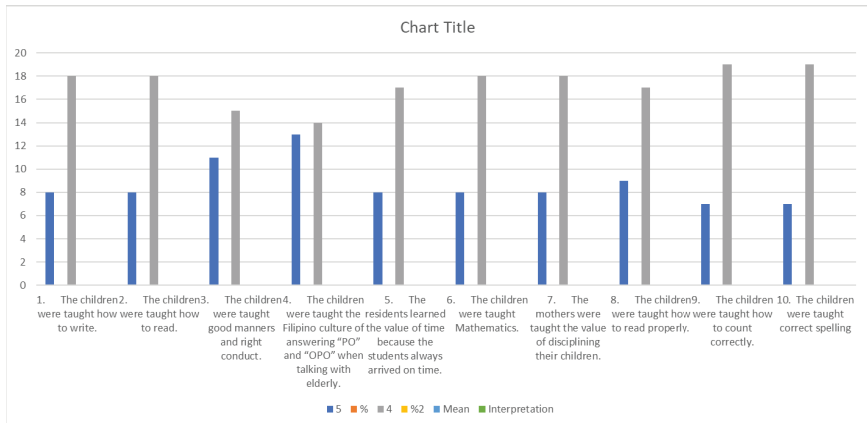


Figure 8. Literacy and Numeracy Program

Table 8 shows that all 10 items pertaining to the Literacy and Numeracy Program rendered by the education students were all accepted by the residents. This literacy and numeracy program will be intensified this summer by select education students by giving a pretest to the pupils before the class will be given and a posttest after the class to determine if the pupils' level of reading, spelling, and arithmetic will be improved.

RESULTS AND DISCUSSION

From 2015-2020, SMCB organized CIPs in Matangtubig that contributed to the development of residents through health and education services. These

services were designed to enhance the quality of life of vulnerable members of the community. As reported by Mughal (2017), extensive experience in community development showed the benefits of projects ranging from the provision of vital healthcare facilities to the development of human resources through the implementation of educational programs tailored to meet the specific needs of a particular community. It must be noted that rural areas' programs and healthcare providers' improvements need to be implemented by sectors with the appropriate resources, qualifications, knowledge, and finance.

Numerous studies demonstrate the effectiveness of university-based community service programs on students' personal, social, ethical, and academic domains, as claimed by Meyer et al. (2019). Results reveal that students volunteering for the community service program show higher levels of empathic concern, generalized trust, and external attributions for poverty. Moreover, their level of internal attributions for poverty is lower than that of students in the control group (Jiranek et al., 2013; Taniguchi & Thomas, 2011; van Tienen et al., 2011; Wilson, 2000). Similarly, the results of the SMCB survey confirmed these findings as our college students who volunteered for community services are shown to be empathetic, helpful, dedicated, and passionate in helping the residents in barangay Matangtubig. Nursing students are trained to do voluntary community services as part of their curriculum in community health nursing.

Through experiential community health learning, students can engage in realistic and genuine activities outside the classroom. Scholars generally agree that community service positively impacts students' personal, social, ethical, and academic domains, as posited by Van Goethem et al. (2014). In the Philippines and other countries, universities' allied health programs and community participation are mandatory (van Goethem et al., 2014).

Previous research on the effects of service programs, including five meta-analyses, generally support the presumption that community service is beneficial (Celio et al., 2011; Conway et al., 2009; Novak et al., 2007; van Goethem et al., 2014; Yorio & Ye, 2012). Empathic concern also correlates with volunteering. Volunteers show deeper empathic concern than non-volunteers (Bekkers, 2005; Finkelstein & Brannick, 2007; Mitani, 2014).

An experimental study by Brunelle et al. (2007) confirmed that community-service participation strengthens empathic concern. Causality remains unclear (Mitani, 2014; van Tienen et al., 2011; Wilhelm & Bekkers, 2010). Nevertheless, the researcher proposed that the empathic attitudes of SMCB students will be strengthened if allowed to perform community service.

The following are the salient findings of the study:

Nursing students must have sufficient knowledge about Maternal-Child Nursing, defined as “the nursing specialty that deals with the care of women throughout their pregnancy and childbirth and the care of their newborn children.” The role of the students as health educators were highly praised by the mothers because they were prepared to render nursing care to the pregnant women in Matangtubig. The nursing students gave lectures on proper breastfeeding, emergency interventions when the babies are with fever, and essential supplementary ferrous sulfate to prevent the occurrence of anemia among pregnant women. They also monitored babies’ proper growth and development by feeding healthy foods, weighing them, and instructing the mothers to benefit from the immunization program of the health center in the community.

The mothers had initial knowledge about the health topics given by the nursing students, but they recognized that their knowledge, attitudes, and skills were enhanced. The nursing students organized the mother’s class in terms of natural family planning, maintenance of proper body hygiene, regular prenatal check-ups for pregnant women, and avoidance of vices during pregnancy, such as smoking and alcoholic drinking.

The residents positively acknowledged the environmental sanitation program organized by the students as teaching responsibility, collaboration, community service, and unity.

CONCLUSIONS

From the findings of the study, it is concluded that (1) it is important that the residents assume personal responsibility to become self-reliant, (2) the role of the nursing and education students in the community is merely to facilitate, guide and help the residents, (3) the residents are the real “actors and performers” who should create positive change in the community, (4) positive change in the community can only be possible if the residents will take personal responsibility to create change and not to rely on others for the longest time, (5) the presence of the nursing and education students should assume supportive roles in inspiring, motivating, and guiding the residents to achieve their health goals, and (6) the main objective of community involvement program is to develop the residents to become autonomous and be responsible for themselves which the residents acknowledged during the interview.

RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations are proposed for consideration, (1) the residents of Barangay Matangtubig may be encouraged to be more knowledgeable and vigilant about their health conditions to prevent the spread of diseases and be responsive in promoting health in the community, (2) the existing health center in the community should be available for consultation to meet the health needs of the residents. Health care access to the community is very important because this will help facilitate monitoring of different health conditions of the people, (3) majority of the respondents of the survey recommended that the school may still extend the CIP of the College in Matangtubig and to organize Income Generating Projects, (4) the Nursing students may educate the residents in terms of health promotion such as proper hygiene, nutrition, waste disposal, management of diseases and health program awareness through their community health nursing course. Their role is to inspire and contribute to preventing diseases in the community.

Although the community involvement of St. Mary's College in Matangtubig for almost 5 years already, some of the residents have expressed their desire to continue the school's Community Involvement Program disrupted by the pandemic. In response to the felt need of the residents, the nursing and education students will organize income-generating projects (IGPs) as part of their culminating activity. Interested residents will be given training in manicures, pedicures, massage, and mixing detergent liquid for sale to augment their income and improve their economic status. To intensify the health education involvement of the nursing students, they will be exposed to Barangay Matangtubig during the summer as their related learning experience in Community Health Nursing. On the other hand, the Education students will have a follow-up of their literacy program this summer. They will collaborate with the local public school to improve their literacy and numeracy activities.

TRANSLATIONAL RESEARCH

The findings of the study entitled: Evaluation on the Effectiveness of Community Involvement Program of Education and Nursing Students 2015 will be disseminated to Barangay Matangtubig officials and residents in a community assembly to increase the awareness of the people regarding their responsibility to become autonomous in handling their health concerns.

The community involvement projects organized by the nursing and education students of St. Mary's College of Baliuag are inclusive of the school's community involvement program in line with the vision and mission of showing creative service to the church, especially the poor. The final activity of introducing income-generating projects, as requested by the residents by teaching those interested in learning massage, manicure, pedicure, and mixing of liquid detergent and downy for sale was done on September 2022 with the student's participation in collaboration with TESDA trainers. This research study will be published in the school's journal, "The Igniter," for broader dissemination.

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