

Treatment access intervention: The Epilepsy Manager Program of the Philippine League Against Epilepsy

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Abstract

The Philippine League Against Epilepsy has a community project which has been named, The Epilepsy Manager Program. It was created to address the needs of patients with epilepsy in the rural areas. An Epilepsy Manager is defined as a non-Neurologist who will render care to persons with epilepsy in the primary care level, in areas of the country where access to Neurologist service is not readily available. The program focuses on training of the Epilepsy Managers. It uses a preceptorship-guided, hands-on strategy. Government doctors or Municipal Health Officers in different provinces volunteer for the program, after it has been fully explained to them. This paper describes the process involved for the training of Epilepsy Managers, and the results of the program after 9 years of implementation.

INTRODUCTION

As in other countries, epilepsy is also a common chronic brain disorder in the Philippines. The Philippines has a population of nearly 95 million (National Census 2011). Using the worldwide incidence of epilepsy of 1%, this converts to an estimated 950,000 Filipinos suffering from epilepsy. There are currently around 371 certified adult and pediatric neurologists practicing in the country. Given the population, the Neurologist to population ratio is 1:256,000. There are Neurologists practicing in each of the 13 geo-political regions, but most of them practice in urban centers. Neurology cases in the rural areas or resource-poor areas, including epilepsy, are often seen by Primary Care Physicians or Municipal Health Doctors, who provide free services in government hospitals or in municipal or “barangay” health centers. A *barangay* or village, is the smallest administrative-unit, usually with a population of less than 15,000. Consultation in these primary care facilities are free, but access to free medications, including antiepileptic drugs are very limited. Rural villagers may go to physicians in private practice but they have to pay out of pocket. The Philippine is a low-middle income country with GNI per capita of USD 2200. The economic growth rate in the recent years has been good. The Department of Health is still in the process of putting in place a government health insurance system to ensure free health care for all its citizens.

Primary Care Physicians in the country commonly feel a lack of confidence to manage epilepsy. They feel that facilities for handling acute seizures are lacking in their communities. Many feel that epilepsy should be managed by specialists.

The continuing medical education of Primary Care Physicians on epilepsy, in underserved areas, are being addressed by occasional one-day outreach programs, limited teaching rounds on hospitalized patients, or round-table discussions by specialists from the Philippine Neurological Association, Philippine League Against Epilepsy (PLAE) and the Child Neurology Society. These efforts have not been enough.

It is in this setting that the PLAE, formulated as part of its mission, “To see that persons with epilepsy have ready access to an efficient referral system from grassroots level to the experts in the field of epilepsy, in collaboration with the Department of Health and other organizations.”

In line with this mission, the Epilepsy Manager Program of the PLAE was born in 2003. It is the brainchild of the Continuing Medical Education Committee of the PLAE, whose members conceptualized the program in response to the glaring lack of medical doctors trained to manage epilepsy in the countryside. The goal of the program is, “To make available to the Filipino people within a radius of one hour bus ride or less from their home, a doctor, who is competent in managing persons with epilepsy in the primary care level.

The Epilepsy Manager Program was created with the aim of training Primary Care Physicians or Municipal Health Doctors, to become “Epilepsy Managers” who will be competent to: 1) Diagnose and manage epilepsy cases at the primary care level; 2) Know the latest trends in the diagnosis and management of epilepsy; 3) Recognize which patients can be treated at the primary care level; 4) Distinguish which patients need to be sent to a tertiary care center; 5) Continue care of these patients after the tertiary referral. The program aims to accomplish these competencies through a preceptorship, with guided, hands-on training in a clinical setting. “Epilepsy Managers”, therefore, are defined as non-neurologist Physicians who render care to persons with epilepsy, at the primary care level, in areas of the country where Neurologist service is not easily available.

In this paper, we review the approach, strategies and methodology that have been used in the implementation of the Epilepsy Manager Program and the results and insights gained from the past 6 programs since it started in 2004.

METHODS

The Epilepsy Manager Program is carried out by a sub-committee of the Committee on Medical Education of the PLAE. Each of the programs is supported by an educational grant from different pharmaceutical companies, with one company taking care of the logistical support of a particular program. The members of the sub-committee work on the project without any remuneration. Each training program is scheduled for a total duration of one year, consisting of: 1) A recruitment and preliminary orientation period; 2) Epilepsy Refresher Course, 3) Epilepsy Clinic, 4) Epilepsy preceptorial sessions and 5) Evaluation.

Recruitment and preliminary orientation

During this initial stage, candidate areas for the program are identified by the committee from among the underserved areas in the country. Special consideration is given to areas in provinces that are recommended by a practicing PLAE member in the province.

The Municipal Health Officers of these underserved areas are identified and invited to a preliminary meeting with the Epilepsy Manager Program committee. During this meeting, the Epilepsy Manager Program is introduced to the Municipal Health Officers, after which the committee asks for volunteers who would commit to the program. To be cost effective,

2 to 4 municipalities in the target province are chosen. The volunteers are then further screened and oriented to the details of the implementation of the program.

Official communication through correspondence is made with the local municipal officials to secure permission for the Epilepsy Manager Program trainees to undergo the program, including participation in the Epilepsy Refresher Course and establishing an epilepsy clinic in their municipality.

Epilepsy Refresher Course

The participants undergo a two day review course on epilepsy usually held in Manila. This consists of lectures, demonstrations, videos and interactive discussions on relevant topics regarding epilepsy (Table 1). The technique and clinical correlation of the neurological examination are reviewed. The participants are also taught how to prepare patient charts that include: 1) A complete epilepsy history; 2) General physical and neurological examination findings; 3) Assessment as to seizure type(s) and epilepsy diagnosis; 4) Management plans, and 5) Follow-up notes.

Epilepsy Clinic and epilepsy preceptorial sessions

The Epilepsy Manager Program trainees are instructed to establish an Epilepsy Clinic where they can see patients with seizures once a week. The trainees choose the particular week day for their epilepsy clinic. During this session, the trainee evaluates all the patients with seizures that would consult at the clinic. The trainee is expected to apply the principles of diagnosis and treatment that were reviewed during the Epilepsy Refresher Course and to document these in the patient’s chart.

Table 1: Main content of the Epilepsy Refresher Course

Definition of terms
Epidemiology and demographics
Discharging focus mechanism
Classification of seizure types
Common epilepsy syndrome
Differential diagnosis of seizures
Etiologies and causes
Work-up
Medical management
Alternative management
Clinical conditions with epilepsy

Once a month, for the next 10 months, a neurologist preceptor visits the Epilepsy Clinic for a one-to-one preceptorial session with the Epilepsy Manager Program trainee. During the visit, the preceptor is expected to do the following:

- Review the clinic census of patients seen during the whole month
- Review the patient charts with regards clinical data, seizure classification, epilepsy diagnosis and treatment
- Observe the trainee on the approach to diagnosis and care for patients with seizure
- Review the difficult cases seen during the month
- Discuss relevant information that will help improve the knowledge, skills and attitude of the trainee regarding care of patients with seizures
- Give advice regarding procurement of relevant diagnostic tests, especially EEG and CT scan, as well as the anti-epileptic medications

Evaluation

During the recruitment and preliminary orientation, the volunteers are interviewed regarding their experience with the care of patients with seizures and the average number of seizure patients seen in their clinic. These data are noted and serve as baseline for the trainees' clinic census. The clinic census is reviewed every month to evaluate increase in awareness of the Epilepsy Clinic and its utilization.

At the start of the Epilepsy Refresher Course a pre-test is given to assess the basic knowledge of the participants regarding epilepsy. At the end of the course, the same pre-test questions are given as an immediate post-test to see whether they have adequate retention of what was reviewed.

At the end of the ten-month preceptorial course, a general evaluation session is held. The pre-test questions given during the Refresher Course are again given as a delayed post-test. This is followed by a problem-based oral/practical examination given by the neurologist preceptors for each of the Epilepsy Manager Program trainee. After the oral exam, the participants are asked for their feedback regarding the program and its implementation. The preceptors, in turn, provide their feedback on the performance of the trainee during the whole program.

Participants who have fulfilled all the requirements of the program are awarded a certificate of completion of the Epilepsy Manager Program. With this certificate, the PLAE

recognizes the successful Epilepsy Manager Program trainees as Epilepsy Managers, and hope that they will continue the epilepsy clinics in their municipalities.

The Epilepsy Managers are then turned over to another PLAE program called the "BRIDGES" (Bridging Referrals To Improve Delivery of Grassroots Epilepsy Services) program. This program is a primary to tertiary referral system composed of volunteer Neurologists in the different regions of the country, whom the Epilepsy Managers can access for continuous learning and consultation regarding the care of their patients with seizures. It is hoped that with this strategy in place, the Epilepsy Managers and their clinics would continue into the future or until Neurologists would become more easily available. They are also invited to attend the annual epilepsy week activities of the PLAE, and are provided registration for the biennial Philippine Epilepsy Congress.

Finances

One epilepsy manager program cost an average of 400,000 Philippine pesos (US \$ 10,000). This covers air transportation, lodging and food for the volunteer neurologists and the trainees when they are seen initially and at the end of the program in Manila. The giving of free antiepileptic drugs is not part of the program.

RESULTS

The program was started in 2004, with the pilot project in the province of Pampanga, in the northern island of Luzon. Four municipalities were chosen and the Municipal Health Doctors underwent the program. The project was evaluated after its conclusion and was deemed implementable. The next three Epilepsy Manager Program were in the provinces of Iloilo and Negros Occidental in the central part of the Philippines called the Visayas. The fifth and sixth projects were carried out simultaneously in the province of Camarines Sur, in the island of Luzon and in the province of Misamis Oriental, in the southern island of Mindanao. We are now on our seventh and eighth projects, being conducted simultaneously in the province of Zamboanga del Norte and Zamboanga del Sur, in the island of Mindanao.

Typically the Epilepsy clinics and managers started in their areas with no patients. By word of mouth and with the help of barangay health workers, the number of new undiagnosed patients and those already diagnosed but with no place to

follow up started to come to the Epilepsy Clinic and gradually increased.

The total number of Epilepsy Managers trained from 2004 to 2012 is 26 (Table 2), with corresponding clinics although one manager has elected to have two clinics in separate towns. Over the 8 years since the start of the Epilepsy Manager Program, 12/27 (44%) of the epilepsy clinics remains active after a mean of 4 years. Of those trained from 2004 to 2010, at least one Epilepsy Clinic and Manager is still going on in four provinces. Of the Epilepsy Managers trained in the two provinces in 2011, the 6 managers and 7 clinics in the provinces of Camarines Sur is active. Only one of the four Epilepsy Managers and Clinics in the province of Misamis oriental is active.

As for assessment of the Epilepsy Managers, as an example, for the Epilepsy Manager Program in Misamis Oriental and Camarines Sur carried out in 2011, the mean pre-test score of the 10 candidates conducted before the Epilepsy Refresher Course was 14.1/30 (range 11-18). The mean immediate post-test score conducted after the Epilepsy Refresher Course was 19.3/30 (range 12-24), a gain over the pre-test score of 5.2. The mean delayed post-test score conducted ten-month preceptorial course for 8 candidates was 17.3/30 (range 11-21). Table 3 list the number of patients managed in the program held in Camarines Sur which involved 6 clinics. As shown there was a total of 285 epilepsy patients, close to half (48%) were new.

DISCUSSION

The Epilepsy Manager Program has taught us that given the opportunity to learn and be guided in the implementation of that learning, municipal health doctors are able to give the necessary care to patients with epilepsy in the rural areas of the country. These doctors started the program, with apprehensions and fears on treating epilepsy patients. But the monthly tutorial sessions have shown that their confidence increase with regularly seeing and managing patients. The increase in the number of clinic patients also attests to the fact that the community has accepted the clinic and trusts the epilepsy manager. The worry of the trainees that they will not be able to learn is negated by the fact that their immediate post-test and delayed post-test scores were maintained, attesting to a good retention of what has been taught. The problem oriented oral examination at the end of the training program, also showed the confidence gained as they argued their cases.

We have also learned to bear our disappointment when it is shown that less than half of the Epilepsy Managers and clinics have survived. Of the 5 provinces where the Epilepsy Manager Program was conducted, only one out of four municipalities still have an active Epilepsy Manager and Clinic were continuing (Table 2). Among the reasons for this, is that the Municipal Health Doctors are also tasked with the implementation of other health projects of the local government and the Department of Health, so that having one more clinic to continue may be too much. There have

Table 2: The current status of the Epilepsy Managers and Clinics in the 7 provinces that the Epilepsy Manager Program has been carried out from 2004

Number of Epilepsy Manager trained 2004-2012			
Province	No. of Epilepsy Managers	No. of Clinics	Clinics still existing
Pampanga	4	4	1
Iloilo (South)	4	4	2
Negros Occidental	4	4	1
Iloilo (North)	4	4	1
Misamis Oriental	4	4	1
Camarines Sur	6	7	7
Total	26	27	12

Table 3: The number of patients seen in the Epilepsy Manager Program carried out in the Camarines Sur province

Epilepsy Manager Program 2011	
Clinics	Total no. of patients (New)
Naga	72 (33)
Lupi	60 (13)
Pili	23 (11)
Tinambac	73 (41)
Bombon	29 (16)
Milaor	28 (23)
Total	285 (137)

been two drop outs of trainees during the program and therefore closure of their epilepsy clinics. This is because the Municipal Health Doctors have been reassigned by the local government to another area. The Epilepsy Manager Program really needs commitment, both from the participating Municipal Health Doctors and from participating Neurologists. Although, having one Epilepsy Clinic and Manager existing where there was none previously, is still an improvement. It is interesting to note that the Epilepsy Manager Program conducted in the province of Camarines Sur is still active, with all the 7 Clinics still maintaining. This is attributed to the very good support given by the local Neurologist who is part of the BRIDGES Program.

The program can be made more successful in the future if we can get committed Municipal Health Doctor volunteers who will give more of their time to serving the community. The program also need more volunteer Neurologists who will be available for the Epilepsy Managers when they have problems. The Epilepsy Manager Program solely focuses on the training of local government doctors to take care of epilepsy patients. Occasionally, the volunteer Neurologist is called upon to increase awareness of epilepsy in the community by giving lay forum. This may be integrated in the program to increase its success. In the future, it has to address the availability of affordable antiepileptic drugs in the grass root level.

We have shown that the program has worked very well for the Philippines. Our treatment access program is primarily an education program focused on training of local government doctors, and not in providing access to free antiepileptic drugs. It may be a model for other countries that may have similar needs.

In conclusion, we believe that the Epilepsy Manager Program is a cost-effective strategy to bring epilepsy care to patients in the rural areas of Philippine. It is able to help PLAE to accomplish its goal “to make available to the Filipino people, within a radius of one hour bus ride or less, a doctor who is competent in managing persons with epilepsy in the primary care level.