

## **CHAPTER III**

### **PROPOSAL**

#### **Strengthening Health Station Staff through Health Education Program to Improve Practice of Mothers / Care Takers in Home Management of Cerebral Palsy Children in Kamphaeng Saen District, Nakhon Pathom, Thailand**

### **3.1 Introduction**

Cerebral palsy (CP) is known to be one of the most causes of physical disability among children. The exact cause of CP is still unknown. No decrease of CP cases have been reported and improved survival of babies with disabilities may be the cause of this persistence. The best advice is to get medical care soon after pregnant. The children with disabilities are normally discharged from institutional settings to the family and community after diagnosis for CP is confirmed. Though CP cannot be cure, treatment or rehabilitation can often improve children's' capability and make their lives more functional (Ahmet, 1995).

Home management is recognized by physical and occupational therapists as the tool that integrate home activities and therapy, which mothers/caretakers can apply it in daily activities in caring of their disable children. Home management becomes a vital tool in preventing secondary impairment among these disable children (Finnie, 1974). In order to practice the appropriate home management, mothers/caretakers need specific knowledge and skills to care of their children. Usually, they can receive these knowledge and skills directly from the physical and occupational therapists in the institutes. So, it is difficult for people living in remote area to access these kind of services.

There is no record on total number of cerebral palsy children in Thailand. Data provided only in some provinces, that Rehabilitation Project for Disable Children have been implemented by government and/or non-governmental organization (NGO). For government data, the number was gathered from Social Welfare department and health stations. The disable children are passively registered in order to receive their welfare. While most of NGOs in each area take primary data from local government as baseline data, then conduct outreach surveys in the area to confirm and to get the most valid data.

### **3.2 Background**

Christian Care Foundation for children with disabilities (CCD) is an NGO that has started to implement a community based rehabilitation program for the disable

children in KamphaengSaen district of NakhonPathom Province since 1998. At the initial phase of the program, CCD conducted the survey of the number of children with physical disabilities in overall district of KamphaengSaen with support from KamphangSaen Club for Disable People. From the survey, it was estimated that the number of children (1 to 15 years old) with physical disabilities was totally 250 and 50% of them (125) was cerebral palsy cases.

With limit fund and staff, CCD has gradually initiated disable child development program together with its welfare services by occasionally teaching individual parents / caretakers on home management during home visit by invited physical therapists (PT). Up to now, their project has been able to include only 30 disable children. The enrolled cases are chosen according to their houses close to CCD office, and the selected subdistrict that disable children cases are concentrated, which is convenience for staff to access. Among these 30 disable children, 12 cases are CP children who have received irregular therapy from voluntary PTs.

At present, CCD has received some extra funding to expand its project to cover more disable children in the district. Before project expanding, it needs to know the effectiveness of present project, including the home management practices of mothers / caretakers both who have enrolled and never enrolled in this project. Data exercise has been implemented to assess the KAP of 30 mothers / caretakers (both enrolling and not enrolling the present project) on home management practices as well as their demographic data. Health provider is also assessed for their involvement in caring of these CP children.

Result from data exercise found that none of any father takes responsibility in caring of CP children. Majority (70%) of families with CP children is poor due to their incomes which are less than 2,800 baht/ family/ month, of which mainly come from the fathers. However, most of mothers/ caretakers also work irregularly either inside or outside their houses most of the days while caring their CP children. Ninety three percent of them have more than 3 children. Eighty percent of mothers / caretakers has elementary education background. About 60% of mothers / caretakers has positive attitude toward home management but their knowledge and actual practices are really need improvement, even some of them have been taught by visiting PTs. Eighty percent of them want to get education service on home management from either health post staff or NGOs staff or both.

### **3.3 Rationale:**

The cerebral palsy children aged over 1 year old have already developed contractures and deformities or the secondary conditions, which are in need for rehabilitation. Although these are fixed and non-progressive lesions but the physical disability of CP children can be worse or better depending on involvement of mothers or caretakers in home management. The home management maximizes function of the CP child and preventing secondary conditions.

Data exercise shown that knowledge and practices of mothers / caretakers on home management are the main concern that need to be improved with some

feasibility. Majority of mothers / care takers accepted that they do not know how to management their CP children at home and what they should do for giving developmental stimulation. Most of them perceived that home management could help in development of their children and if their knowledge on home management is improved, they may be able to better manage their children. Most of these mothers / caretakers want to make their CP children's life better if they can afford to do so.

The specific knowledge and skills on home management of poor mothers / caretakers to care of CP children could be improved by learning from PTs who usually base in institution services. For the remote area in KhamPhaeng Saen district, poor mothers / caretakers face difficulty to access this services. This access gap could be filled by using other resources such as health station staff, who work in their community and also have responsibilities in rehabilitation.

The general responsibilities of health station staff include primary treatment, health promotion, health prevention and rehabilitation. From data exercise, interviewed health provider shows his willing to help in giving home management education to mothers / caretakers, but has not sufficient knowledge on it. There is no specific material on home management available for health station staff.

In Kamphaeng Sean, health station staff are familiar with people in the community because majority of them come from those communities, so less culture and language barriers. Health staff could play a role to effect the knowledge of mothers / caretakers. During health staff's home visit, or when mothers bring their children to

health station for any activities, such as vaccination, physical examination, health staff can provide information about CP child and giving guidance to mothers / caretakers on home management.

The possible intervention strategy that could be used to improve knowledge of mothers /caretakers in order to change their practices towards home management for CP children is providing education program on home management through health station staff. This strategy could be sustainable as it uses existing health service in the community as an advantage.

### **3.3.1 Health Education & Health Promotion**

Health Education is the process of educating people about health and it can be defined as *"Process of continuum of learning which enable people as individual and members of social structures, to voluntarily make decisions in ways which are health enhancing"* (Joint committee on health education terminology report 1991, p.103). It is recognized as an important tool to change attitude, behavior, practice and the risk factors associated with disease or health problems.

Health Promotion is a broader term than Health Education. Green and Kreuter (1991) defined Health Promotion as *"the combination of education and environment supports for actions and conditions of living conducive to health"*. In this definition, education refers to health education, and environment refers to social, political, organization, policy, economic, and regulatory circumstances bearing on health. Health promotion can enable people to improve their health, which is related to the concept of

the application of home management to CP children. It is expected that, health staff can play the role as educator to provide scientific health related information, which help to increase the knowledge of mothers/ caretakers on home management for CP children.

### **3.3.2 Enabling Home Management on CP Children by Mothers /**

#### **Caretakers:**

Enabling home management is concerned as promoting health by influencing life style, health services and environment. The project aims to improve the practice of mothers/care takers in home management for CP by using education program that will focus on the internal factors that can intervene knowledge, attitude, and practice of mothers/care takers on home management for CP. Thus, this project will strengthen knowledge and attitude of health staff in the community in order to provide education service for mothers / caretakers of CP children.

An example of successful home management education program for mothers/caretakers with CP children is in Uthumpornpisai district, SriSaKet province, in 1999. The program trained health station staff together with mothers / caretakers on home management of their CP children in district hospital. Both government and NGO supported this program for human resources and funding. This program started with good cooperation and strong commitment of the chief medical officer and an NGO who has experienced with disable children. In this program, the physical therapist directly trained mothers/caretakers how to integrate home management in their daily activities in simple way. Later, health staff could monitor and recommend only mother / caretaker with the CP model cases that participated in the training course. Therefore,

the health staff could not recommend mother / caretaker with new CP cases. To increase the ability of existing health providers for sustainable human resource in the community, extensive home management training for health staff is needed.

This following proposal is designed to directly train health staff to educate the mothers/caretakers with CP children.

### **3.4 Objectives**

#### **3.4.1 General Objectives**

The general objective of this study is stated as to:

The mothers/ caretakers can practice appropriate home management for cerebral palsied children.

#### **3.4.2 Specific Objectives:**

The following specific objectives of this study are:

- To strengthen home management education service of health station staff for mothers / care takers
- To increase knowledge on home management among mothers/care takers of CP children.
- To improve the practice of mothers / care takers in home management for CP children



## **3.5 Methodology**

### **3.5.1 Study Approach**

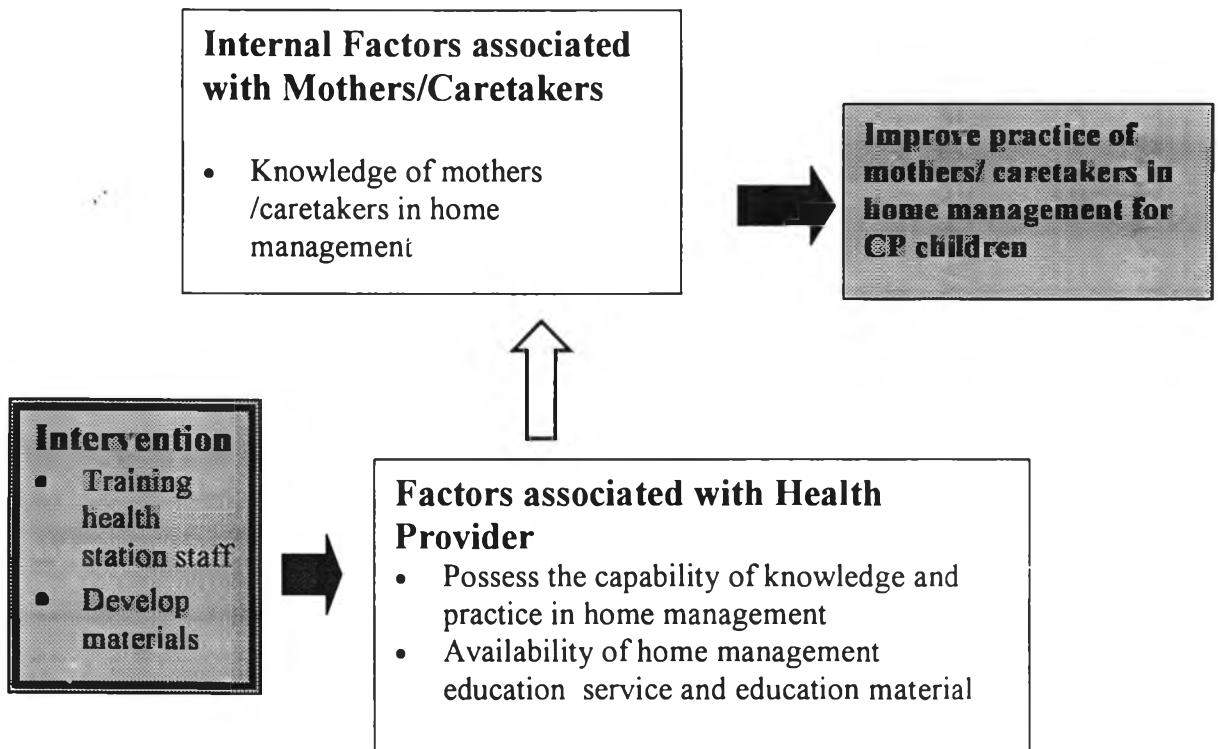
Both qualitative and quantitative approach are utilized during the process of health education program to strengthen health station staff to improve the knowledge, attitude and practice of mothers / care takers in home management of cerebral palsy children

### **3.5.2 Conceptual frame work**

The conceptual framework of this proposal, which aim to improve practice of mothers/caretakers in home management for CP children By using health station staff as the home management educator, who also work in the same community and have job responsibilities in primary treatment, health promotion, prevention and rehabilitation.

The health station staff attend a training course on knowledge and skill on home management for CP children. These trained health staff will provide the home management education service direct to mothers/caretakers that can effect the knowledge, attitude and practice of mothers/caretakers in home management. Therefore, access to home management education service could improve the practice of mothers/caretakers in home management for CP children.

**Figure 3.1: A conceptual framework on improving practice of mothers / caretakers in home management for CP children**



### 3.5.3 Study Location

The study will take place in Kamphaeng Saen district, Nakhon Pathom province.

### 3.5.4 Program Description

In this proposed program: strengthen health station staff to improve practice of mothers/caretakers in home management of cerebral palsy children, focus on training health station staff who are mainly provide health services in the community and stay in the same community of mothers/caretakers with CP children. A strategy of training health station staff dose not cost huge money and it increases the community

participation. The health staffs who being a member of the same community can play a main role of increasing the community participation through the process of providing education service by involving and sharing ideas with the mothers/caretakers for the betterment of their CP children. To achieve objectives a good planning is necessary. It needs to be clear understandable, sequential and feasible. Therefore planning are divided in to 3 phases: 1) IEC development and training health station staff, 2) Implement health education for mothers caretakers, and 3) monitoring and evaluation.

An open forum with the presence of the community, health staff, project coordinator of CCD, and concerned citizens an open commitment between the chief medical officers, and their staff. With this commitment, cooperation of the chief medical officer and their staff in the operation and monitoring of the project. This project will be coordinated with the project coordinator of CCD. On the other hand, the budget allocation for home management education program such as for IEC development, hiring of physical therapist will take the responsibility by the CCD.

#### **3.5.4.1 Information, Education and Communication (IEC)**

##### **development and training of health station staff:**

##### **a) Information, Education and Communication (IEC)**

Development: Most of the health station staff has above secondary education, thus the guide booklet from WHO (1993) which is applicable for mid-level rehabilitation workers will be translated to Thai language and to be used in

- the training, which will be a good reference for them in the future.
- b) Training health station staff: Selected six health station staff which concentrate on CP children cases from the subdistrict will be attending the training class before giving home management education to the mothers/caretakers. The active learning will be one of the strategies to be used in the training class in order to share the experience and creative thinking for developing the most suitable strategies on home management education.

To improve practice of mothers/caretakers on home management, health station staffs who are familiar with people in the community will be involved in the program. Before taking responsibility to provide home management education program, they need to have specific knowledge on cerebral palsy and skills in home management. Therefore, this training will increase skills and knowledge of health station staff in home management.

This training is design for 5 days sessions. The expected participants of the training must have more than 2 years working experience in the community. The training will focus on the active participation of health station staff through sharing their experiences, delivering lectures on the home management for CP child, actual demonstrations, which will be guided by the experts.

#### **3.5.4.2 Health Education Implementation:**

All mothers/caretakers with cerebral palsy children who live in the sub-district will get home management education at home or at health station under the supervision of the health station staff. Later, it will boost the mothers/caretakers to encourage them to learn more. The health staff on the other hand, will observe and sometime visit their home once a month to know progress or the improvement they have undertaking.

On the part of imparting health education through face to face approach at home and group discussion technique at health station, health education can be applied depending upon the health station staff strategies and the actual situations. Later mothers / caretakers who were successful in practicing the home management skills will be used as a case study and will be invited to share their experiences during health education sessions at health station. Their experiences can be a tool to encourage mothers/caretakers to practice or do the same technique on home management for their CP child.

At the end of the month, all health station staff will submit their reports as usual. Monthly meeting to be organized by CCD will be arranged for identifying and solving the problems encountered among health station staff of this program.

#### **3.5.4.3 Monitoring and Evaluation**

Monitoring will start at the beginning of the program and it will be continuously. At the end of the month report from health station will be submitted to the chief of the health station and the supervisor of the program. Meeting will be

arranged regularly to discuss all progresses and problems that will serve as the center for problem solving. An evaluation will follow using the KAP survey to measure the progress of knowledge and practice of the mothers / caretakers in home management before and after an intervention take place.

The proposed program will be evaluated in two stages by apply both qualitative and quantitative approach for effectiveness and feasibility of the program.

**A. Stage I: Evaluation of Health Station Staff:**

A brief evaluation will be done before and after the training. The evaluation will be done in an informal approach with regards to their experiences on how they can apply the knowledge they have gained from the training and how can it was handed down to the mother / care takers in the community. Informal approach will be done through sharing of ideas, and experiences. Informal conversation is also applicable through actual demonstration and observation of the skills they've possess and practical exercise that can help to assess their abilities and capabilities how to handle the home management education service.

**B. Stage II: Evaluation of the outcome of the program**

**B.1 In term of effectiveness**

To evaluate the outcome of the program, KAP questionnaire can be used to measured the progress of the mothers/ care takers who participated in the program. Such tool also help to measure the knowledge and practice of the mothers / care takers in home management with CP child. The results of the evaluation will also help to plan

a continuing program to produced a well trained mothers / care takers with CP child that will be a long term chained of reactions of training among the mothers / care takers.

**a. Pre Test KAP Survey**

The 1<sup>st</sup> KAP survey will be conducted before the implementation of the home management education with a structured interview questionnaire.

Two health staffs from CCD will be trained to interview and collect the data. The survey will take place for 5 days and the participants will be informed through the health station staff of the sub-district.

**b. Post Test KAP Survey**

This step will be conducted the same process as pre-test KAP survey but will be performed after the intervention takes place for about 6 months. Later estimated program effectiveness will be based on the difference between pre and post intervention on KAP of mother / care takers.

**c. Sampling**

All mothers / care takers with CP child in six ( 6 ) sub- districts with CP cases as follows:

Kra Teeb	Sra Si Mum	Don Koy
Huay Muang	Tung Look Nok	Tung Bua

Since the area are dominated with CP child cases, all the mothers / caretakers were chosen to be the sample of the study.

#### **d. Sample Size**

As per survey of the health station staff and CCD staff a total number of mothers / care takers with CP child cases is thirty six are residing in these sub- districts.

#### **e. Data Collection**

A set of interview questionnaire will be developed (see: Annex questionnaire) as an instrument to collect the data. This questionnaire includes three main parts, the knowledge, attitude and practice towards home management for CP child, respectively. The two CCD staff will be trained to interview the participants with the questionnaire before collecting data in order to reduce bias and error. Also the pre-test of the questionnaire will be conducted before applying in the real situation to assess the validity and reliability of the questionnaire. Later, data will be checked for completion, and re-coding by the supervisor of this program.

The data obtained will be analyzed by SPSS computer software program using the descriptive frequency. The mean value of pre and post outcomes will be compared to measure the effectiveness of the result of the program.

$$\text{Program Effectiveness} = (P2-P1) / n$$

Where: P1 and P2 = pre and post-test outcome measures



## **B.2 In terms of feasibility**

The feasibility of the program is also important for the program. This will be measured by:

- 1) Evaluation of reports of health station in term of the number of home management education service given to the mother / care takers at health station and by the number of health station staff visit at home.
- 2) Interview through an outlined question with the trained health station staffs who give the home management education service to the mothers/care takers with CP children.

## **3.6 Human Resource and Technical Requirement**

This proposed program is designed as a coordinated program between the CCD staff and the health station staff. According to both staff that came from different kind of organizations that need to understand the role of each one of them. An agreement should be settle down who will be responsible for every task they have to do. With the division of labor and responsibility an experienced trainer is needed to handle the home management education for the health station staff.

## **3.7 Risk & Assumptions**

Firstly, this study deals with practice of mothers / care takers, to measure improvement of practice after the intervention. The result of KAP survey is not a

warrantee that improvement has taken place. Feedback from the mothers / care takers during the interview may vary according to their styles and cultures, or whatever reasons they will give according to their intended practices while others may say that they have improved. Therefore, regular observations of mothers/caretakers by health station staff who stay in the same community and close with the mothers / caretakers are essential. In this case, strengthening the knowledge in home management of health station staff can improve the practice and increase the knowledge of the mothers / care takers in home management.

The result of the program can be negative if the health station staff has to attend to other duties directly from the provincial health office, there'll be a tendency that the mothers / caretakers will be neglected. In order to deal with this risk the project coordinator of CCD will seek assistance from CCD's staff who deals with the same cases. Another risk is the efficiency of the health station staff will be less if there's a lot of work to be done aside from their regular and routine work. This risk can deal by introducing some sort of incentive in term of rewards like appreciation and recognition of their hard work. In cases, when there is a funding allocated to the project a financial reward can be awarded for their effort. To ensure commitment from the health station chief the mentioned risk can be applied depending on individual concern. If such program will be successful for both effectiveness and feasibility, this program can be extended to other sub-districts with the same case.



### 3.10 Budget

Item	Description	Breakdown ( Baht)	Cost (Baht)
<i>Project Administration</i>	12 months	10,000 baht / month	120,000
<i>Develop material</i> Materials and Documents Printing Cost	100 booklets	<b>150 baht /each</b>	15,000
<i>Training course</i> - Participants - Trainer	6persons, 5 days 1person, 5 days	150 baht / day / person <b>500 baht /day/person</b>	4,500 2,500
<i>K.A.P. survey 1<sup>st</sup></i> - Personnel - Printing Document - Data Processing	2 persons,5 days 36 questionnaire 1 person,2 days	300 baht / day / person 10 baht / questionnaire 500 baht / day / person	3,000 360 1,000
<i>Implement Education Program</i>		None	None
<i>Monitoring and Evaluation</i> -Monthly meeting	12 times,9 persons	Soft drink & snack	3,240
<i>K.A.P. survey 2<sup>nd</sup></i> - Personnel - Printing documents - Data processing	2 persons, 5 days 36 questionnaire 1 person, 2 days	300 baht /day/ person 10 baht /questionnaire 500 baht / day /person	3,000 360 1,000
Data analyze and Writing Report	1 person,5days	500 baht / day / person	2,500
Miscellaneous			2,000
<b>Grand total</b>			<b>158,460</b>

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