Thailand Assistance System for Persons at Risk of Suicide (ASPRS)

1. Problems, background and importance leading to the idea

Over the past 45 years, in 60% of worldwide countries, the suicide rate has increased. World Health Organization (2009) states the suicide death rate each per year is approximately 1 million people, in average, one person per every 40 seconds. While, each year, 10 - 20 million people that have attempted suicide, it is estimated that in 2020, the suicide rate of people will increase 1.5 million.

In Thailand, the trend of suicide circumstances is consistent with that of the world. In 1999, as never seen before in 10 years, the national rate of suicide increased to 8.59 per hundred thousand of population. The number of those attempting suicide, who came to receive the service, had steadily increased during the years 1997-2001 as well. This was associated with the global economic crisis in 1997 (Bureau of Policy and Strategy, 1999).

According to epidemiological studies of Khon Kaen Rajanagarindra Psychiatric Hospital on behavior of those with suicide attempts, it is found that the number of people trying to harm themselves is up to 25,000 - 27,000 per a year and that of the death of those with suicide commitment is approximately 4,500 - 5,500 per a year. In average, there are 14 people committing suicide within a day. Of this, the number of males is three times higher than that of females. Mostly, their ages are between 20 -39. The groups of farmers and labor workers are found to have the highest suicide rate. The problem is also associated with chronic diseases, psychiatric illnesses, alcohol and addictive drug use. The people who committed suicide take 24 -72 hours to decide to harm themselves (Aphichai Mongkhon and Colleagues, 2003). This is unpreventable. 2.5 % of those who commit suicide will also hurt their close people. In the years 1997-2001, the trend of the number of those, attempting suicide and coming to receive the service, had increased, but only 3.39 % of patients with depression were able to access depression treatment service. If this problem is not solved, in Thai society, the suicide rate will grow doubly in the future. Accordingly, this includes the cost, 41-107 million baht a year, of service which the government must bear. Especially, the impact occurred would result in at least six of the close people. This causes mental health problems of those being affected by the suicide problem, as many as 31,000 people a year. The suicide therefore is not the end of problem, but is a beginning point of a warning signal reflecting the quality of people lives in the society. This dark danger should have been solved seriously.

From an information analysis of mental health problems in the responsible areas of 7 provinces, it is found that the suicide rate has increased as well. Khon Kaen Rajanagarindra Psychiatric Hospital, Department of Mental Health, is an organization that has a role in development of mental health, promotion, prevention, treatment and rehabilitation of those with mental health and psychiatric problems. It recognizes the importance of increasing accessibility of the services for those suffered from psychological crises with the aim that those individuals will have been monitored and aided by quality, comprehensive and mental health care timely. It therefore pays attention on and studies the causes and effective solutions of the problems. Accordingly, there was a survey, in the cooperation with the mental health team in Sakon Nakhon province, among
those at the risk of suicide, caregivers, volunteers (ร่วม.), and health personnel in the area. The essential issues found among the group of those involved in suicide prevention and solutions were as follows:

1. Those attempting suicide cannot withstand the social pressure and crises that affects their mental conditions such as sadness, disappointment, argument with someone close, no-solutions for the problems and unconsciousness against self-harm, shame matters, weakness and inability. They therefore denied their illnesses or ignored the warning signs of illness and treatment. This is a critical barrier of an access to service system.

2. The members of the family, surrounding people, or community leaders lack of understanding and have wrong attitude, lack of care and prevention of self-harm attempt. It is seen as a personal matter, heretical claim and attention seeking. They so ignored the warning signals occurred.

3. There were not the protection system before the incident occurrence and the continuous care. There was only a defensive system available to support the survivors of suicide and that provided the form of care and treatment for general patients because the knowledge and technology have not been studied specifically. The existing set of knowledge was mainly associated with providing medical and diagnostic services to those with mental health problems and psychiatric disorders. There was no clear pattern or specific issues. The one available was translated from foreign knowledge which was inconsistent with Thai lifestyle, culture and lives.

4. The health personnel lacked of knowledge and confidence in the skills of care and practices. There was no training seminar to improve their work efficiency and was also the lack of continuity and inconsistencies with the occurred problem. This caused discontinuity of the form of forwarding information within the community and a lack of continuously monitoring. The obtained information has been just the quantity of people who received the service which cannot be used beneficially towards the solutions of the problems.

So, receiving treatment of those who attempt suicide was only in the end result. They turned back to hurt themselves over and eventually died. Having left this situation to continue, there is not just the lost of one person, but it also affects members of the family. The relevant people who are feeling guilty in concealing information and do not get help from the society will become the new mental patients and have imitation behavior.

Under social and cultural change, adaptation of the country to the AEC, conflict of opinion and natural disasters are all risk factors that motivate the individuals who are unable to adjust to them decide to hurt themselves any time. Therefore, it is very important to have a care system to prevent this problem to be more widespread.
2. Scope and Overview of Problem Solution

Khon Kaen Rajanagarindra Psychiatric Hospital has analyzed the data to find the original causes of the problem. This has rendered the guiding answer of the effective implementation of suicide prevention and suicide solving performance. The main goal determined of the operation is to reduce the suicide rate as the determined target. Those who attempted suicide but failed have received help and care continuously. This results in the decrease in the attempted suicide rate. The concepts of the operation are as follows:

1) In the term of establishing the awareness of the public, negative feelings (stigma) should be reduced with the promotion through the media in various channels. Social awareness to people and those who are close to them community become interested in self-assessment and the signs of self-harm by using the powerful tool, convenient and easy to use in screening and self-assessment should be raised. Also, there are channels to receive the services of public health agencies near their residential area, including opening of a 24-hours-hotline in mental health services. This made those in the risk group given the opportunity to access services even more.

2) To set up the readiness of services and supports for the target group, according to the problems in each area. In other words, the problem cannot be solved at any one person only, but
the care should cover family, community and society to be secured. The content of the training is to raise awareness and cooperation of the network-parties in the form of services emphasizing on the integrated work for providing alternative therapies according to the context of faith and culture. Dissemination of knowledge related to the skills through E-Learning systems includes the development of supervision, monitoring, reporting system and evaluation improves service quality continuously and efficiently.

3) To promote cooperation between the network-parties within and outside the community; namely, health service units, teachers and community leaders. This leads to the results that the populations in the risk group have been identified, screened and received the care in time. After obtaining consultation services and treatment by the health service network, they will be monitored till they are safe. Also, they will receive social assistance by a network parties in the community so that they do not return to repeat their self-harm.

4) To develop knowledge, knowledge management and information by scientific process, there are the support for development of research knowledge, innovation and technology continuously, and creation of the manual to protect and assist those at risk of suicide in health service facilities and the guideline manual for medical practices for physicians in caring of those with depression and risk of suicide including giving importance in assessment in terms of efficiency and results brought to the public.

5) There is a database system related to suicide issues in Thailand. The data recording system of depression and suicide risk monitoring allows scholars to have various resources used to study and understand the problems of each area in the country. Also, it is information used to make a decision for the executives to determine an implementation strategy (warning system). Also, the practitioners can use them as information for the evaluation of past performance and determine the operation to be consistent with the target group effectively.

3. Difference between the original and the new solution to the problem; how is it better?

In the past, the issue of suicide may be found in most areas of Thailand. However, the information reported in the news reflected only the problem on the top of the iceberg. The problem of suicide has been seen as a matter of individual or family. There is no epidemic contact as same as any other diseases. The solution of the problems in the past was the same as that of general health problems. There was no searching system to identify the risk groups in the community as well as no screening tool used to search this risk population particularly. When self-harm occurred, an individual care in the form of health service was the same as the health service for common illnesses. The health personnel and community leaders were not confident in the knowledge used to assist people who were trying to hurt themselves and their families. Also, it was complicated when there was a need to help and heal the mind of the families that have the member trying to commit suicide. The coordinating system and referring the case for monitoring
of those trying to hurt themselves in the community had lacked of clarity. The existing set of knowledge was mainly associated with providing medical diagnose services to those with mental health problems and psychiatric disorders. The data stored in the report could not be used to describe the phenomenon and applied to problems in the systematical term.

The care system to help those at risk of suicide in this development designed from learning and the lessons in real situation in pilot areas under the context of Thai society leads to the acquisition of the prototype model in the underlying province. It also can be extended to other areas across all provinces of the country. It is the guideline solution in the term of service systems. The clear administrative management and knowledge development are distinct from the old system as follows:

3.1 **There is the fully integrated and continuous operating system.** Preventing suicide is not a task that can be measured its results straight away. Or, if there are external interfered factors, it will affect the operation. The implementation system, therefore, must be linked from the community to the service system and referring the case back to the covered community. It has focused on holistic care to individuals, both physically and mentally. Operations that can pull alignments such as, monks and the community leaders plays an important role in the community to take part in the operation by producing technology that is supportive to the operation in the various risk groups, covering all age groups in the population at risk.

3.2 **There is the personnel efficiency improvement, creating a partnership of several organizations inside and outside of the Ministry of Health.** The content of the training to improve and restore the efficiency each year will be surveyed based on the opinion and requirements of the area. It is defined as the point of the training to help in attracting attention of practitioners. There is the development of technology that could be used in a variety of languages and dialects. In the term of practices, there is the guideline for health workers, nurses and medical doctors by classifying the levels of service units. The personal development of each province (In average, there will be the development of the main speakers in the province, 1-3 people) served as lecturers that transfer knowledge to the personnel in other departments. The mental health centers and psychiatric hospitals, the Department of Mental Health, serve as a consultant and supervisor for the staff in the network-parties in responsible areas.

3.3 **There is the promotion of knowledge and awareness of the importance of the issue by using campaign activities every year continuously.** Initially, there is publicity via radio, broadcast towers and media. There is also a survey of satisfaction towards the project and public opinion on the media and access. For the presses, there will be a news release, joining in news health reports and interviews in both radio and TV. The production of audio and visual advertising media is created so that the media is able to publish news correctly. There is no occurrence of an imitation of the people and is encouragement for the public to access to all service channels such as consulting services via telephone number: 1323, 1667 and 1669, and expansion of information distribution channels through Website: suicidethai.com.
3.4 There is clarification of understanding in the access of the real problem. The comprehensive implementation covering all aspects related to suicide is conducted. In the terms of risk factors and protective factors, an epidemiological study of self-harm patients since 2004-2009 designed to be used to prevent and solve problems appropriate to use in Thailand has been conducted especially in some areas such as the North where the suicide statistics decreased. However, this is still higher than any other regions. In 2009, there was the cooperation with the Office of Health, Lampoon and Chaing Mai University to study, only in the northern part, the socio-cultural factors that have specific characteristics of the region that influence the behavior of self-harm (Busaba Anusak and colleagues, 2009). Epidemiological studies have been conducted constantly and in 2010, it was conducted in two provinces in the North-eastern area which was the collaboration between the Khon Kaen Rajanagarindra Psychiatric Hospital and the Faculty of Medicine, Khon Kaen University on the faith and cultural factors that affect the protective and risk factors for those with self-harm attempts.

3.5 There is the information system, Early Warning System in the national level. There is the information development of suicide attempts and suicide completion, which is a shared plan between the network service provider for each area/people involved in determination of the information storage. There will be a guideline manual of data collection to strengthen understanding between the information collectors and reporters. It is important information used for policy and goal determination of implementation and evaluation.

3.6 On the roadmap, the objectives are set clearly in short and long terms covering the community, regional and national levels so that the operation has the same approach in the overall perspective. In regional or provincial levels, it has to be in accordance with the demographic characteristics, beliefs and culture of the area. There is a Thai national database which supports the evaluation and contributes to strategy adjustment to cope with the situation timely. This makes the availability of the activity plan specific to prevent the problem each year. Some activities may focus on solving the risk factors or enhancing protective factors without the goal of suicide reduction only; however, they still have an effect on other aspects such as quality of life, equitable access to services, promotion of social understanding towards mental health, raising social awareness on mental health care of self and close persons, reducing the bias towards the illness and more understanding of the guidelines for treatment.
4. Identifying the purpose, strategy and method of operation

The year 1999 was the beginning of the system of care to help those at risk of suicide in Thailand. It has the sequences of development as follows:

Phase 1: "Sakon Nakhon Model" (1999 - 2001), Khon Kaen Rajanagarindra Psychiatric Hospital conducted the study and data collection on the problems of suicide in the actual field by interviewing those with the suicide attempt, their relatives, community leaders and health personnel. This leads to finding of the issues of difficulties to access to services and the form of discontinuous care. Therefore, the data are brought to develop a training course to assist those attempting suicide to nurses and health personnel. Thereafter, there was an arrangement of brainstorming meeting of health personnel and community leaders, leading to the guideline of implementation in the cooperation between health personnel and community leaders. The report of information forwarding and care record assisted those with suicide attempt to re-monitor the assessment, and developed as ‘Sakon Nakhon Model’.

Phase 2: This phase began its experimenting extension during the years 2001-2003. The Department of Mental Health assigned Khon Kaen Rajanagarindra Psychiatric Hospital to act as the project manager for model extending to other areas of the country. The hospital thus brought the Sakon Nakhon model to compare its academic content with research journal and domestic research and asked the opinion of units under the Department of Mental Health to analyze in the term of its actual usage in other regions. This led to the acquirement of the provincial prototype
model and presentation of the criteria for selecting 33 provinces participating in the project. They should be the provinces which have the high suicide rate in the high priority from the four regions of the country and their administrators are welcomed and supportive to participate in the project.

Phase 3: This period was the initial point of screening model (2003 -2004). The additional issues of the conference is that the original screening tool has quite a lot of questions, is difficult to comprehend and translated from foreign countries. In 2003, Khon Kaen Rajanagarindra Psychiatric Hospital developed a screening model, with 15 items of depression and screening model for those with a high risk of suicide, with 10 items and applied the provincial prototype model to 33 provinces to assess the effectiveness of their operations. Therefore, with the cooperation of Khon Kaen University which was a designer and in charge of the result's assessment of the project, there was the development of a recording model of care for those with suicide attempts from the service unit as the form of depression monitoring and self-harm (R.Ng. 506 Depression and Suicide), so that each unit has the clear guidelines for assessment and forwarding information of those with self-harm attempt.

In the years 2004 - 2006, the provincial prototype model was used across the country and those who were responsible in each community hospital were determined. The data were collected and the reports were sent to the provincial Health Office as well as the Khon Kaen Rajanagarindra Psychiatric Hospital in order to be gathered as the national information to be analyzed and classified according to the problem severity levels in each area. The data obtained were analyzed to determine the national standard and were presented to the executives of the department of mental health. The Khon Kaen Rajanagarindra Psychiatric Hospital therefore was encouraged to continue this project.

Phase 4: "support of constant service" (2007 - 2010), the operation was managed across the nation continuously. The results from reporting system from all areas and information from the death certificates were compared to determine the reliability. The GIS chart thus was created. This was the year that Khon Kaen Rajanagarindra Psychiatric Hospital began to adjust its role in the terms of supporting and monitoring to keep the continuous service system and operation by organizing meetings of planning, supervising in areas with difficulties, academic conferences and evaluations. It therefore was given a proposal to develop a new screening model called "Screening model for depression and risk of suicide (DS8)" for convenience and ease in usage.

Having reflected on the issues and proceeding operations, the executive of the department of health recognized and designated it as one of the national operation indicators of the Ministry of Health since 2009 onwards.

Phase 5: The development of knowledge became an innovation in the area (2010 - 2011). The suicide rate decline began to slow down (the suicide rate for 2007-2009 was 5.97-5.98 per hundred thousand of the population). The northern area was still an area that the suicide rate was higher than other sectors. When the data within this the northern region were additionally analyzed, it found that social and cultural factors had some influences on the rate of suicide.
Khon Kaen Rajanagarindra Psychiatric Hospital joined the Lamphun Provincial Health Office, Chaing Mai University to study cultural and educational factors associated with suicide in 8 provinces in the upper part of the north. In 2011, in collaboration with Khon Kaen University, there was the study in two provinces in the Northeast. In the 2011 national academic contest, social and cultural factors for preventing suicide were determined as the main theme of innovation. There was the presentation of the projects organized in the areas with high rates of suicide such as Alcohol-free campaign in Funeral Project, the Alms offering for suffering release and Intellectual heritage - Creating value for the elderly and so on.

Phase 6: "The turning point of the role to the international level" (2011-2012). It was the ending period of the operation as a project manager and goal achievement of suicide rate reduction. From empirical evidence from the result evaluation of operation, it also identified the factors of sustainability, which requires the cooperation of the community. There was the cooperation with Chaing Rai Provincial Health Office to present this issue to Lanna Health assembly (North) to be recognized its importance and forwarded as the agenda of solution for the suicide problem to the National Health Assembly. This caused the problem of suicide determined as a national agenda of the 4th National Health Assembly, 2011.

In 2012, this was the end of the role as the project manager because CSSL was integrated into the routine. Khon Kaen Rajanagarindra Psychiatric Hospital so stepped into a new role as a national academic unit with specialized solutions for preventing suicide. Of operating experience over the last ten years, new operational activities were set up by focusing on development activities as an international center of learning. Being a leader in the development of knowledge and specialized courses, there were academic exchanges between Singapore, Hong Kong and international academic presentations including sending personnel to attend the world class conference. In 2013, this caused some ASEAN countries (Cambodia) personnel to study the project in Thailand.

5. Identifying direct and indirect involved persons

According to the purposes, target determined and strategies used to ensure the project success, there is the division of personnel to operate the project’s activities according to the scope and context of the unit as follows:

1) In the national level, Khon Kaen Rajanagarindra Psychiatric Hospital is the agency that serves to analyze the problem and presents it to the executives to determine the strategy in the department level. In the provincial level, there are the design and implementation of activities defined in the project, budget management, adequate resources, monitoring and evaluation as the overview of the nation.
2) In regional level, mental health centers and each of psychiatric hospitals under the Mental Health Department will support knowledge and lecturers due to the needs of the area as the head of a mental health care network in the regional level, including monitoring, supervising, supporting/ driving the local health unit to have various service channels, such as providing mental health education, telephone counseling, individual counseling and group treatment.

3) In provincial and district level, the health office will be an agency that has a primary role in coordination, policy transmission and driving mechanism according to plans to achieve the targets, data collection and reports as the head of the provincial network of mental health care monitoring, supporting and supervising the project to meet the set target. It therefore, has an important role to design activities in the area well.

4) In community level, social subordinate unit has a critical role in creating knowledge and understanding of mental health to the public to recognize the importance of care of their close people in order to access services when there is the risk of suicide. As well as it acts as the monitoring unit following up those with self-harm attempt until they are safe, and as the agency that well reflects the results of operations.

6. How are resources used to drive such activities used to make the project successful?

• In the aspect of budget used in the project, the budget comes from support from the Bureau of the Budget under the mental care development project, Department of Mental Health in 2004-2012 (Figure: 1). For the proportion of budget management, the first phase of operation (2001-2005) budget, approximately 30% of the budget was used as the supportive budget for each province to develop its service system and staff improvement in the area. The mental health centers and psychiatric hospitals under the department of Health served as a consultant, academic provider and supervisor closely. After the year 2006, the budget of the operation was reduced for the provinces. The balanced budget was used for database storage (30,000 Baht for each province) and research in the areas (8 provinces), and in 2007, the budget received was the budget spent on the operation by Khon Kaen Rajanagarindra Psychiatric Hospital.
In technical term, since the operation from 2001-2012, there have been tool and media technology production to prevent and tackle the suicide problem classified for the public, health personnel, doctors and nurses in total 11 matters. This excludes innovations developed from the area (on average: 10-12 matters per year).

In the term of human resources, there was the development of personnel inside and outside the network each year. It was found that the target groups most improved were the groups of volunteers, community leaders, village headman and village leaders, in average of 809 people per province, followed by teachers, in average of each province 166 and nurses, in average of 100 people per province.
7. Identifying tangible achievement leading to the success of the problem solution

Figure 5: the suicide rate in Thailand, 1999-2012, BE.2542 - 2555.

Source: Bureau of Policy and Strategy, Ministry of Health (2545-2552) and R. Ng. 2, Provincial Health Office

Due to the steady decrease in the suicide rate in the country after the project has been conducted continuously in last 10 years, it has clearly demonstrated its tangible effectiveness, compared with the suicide rates between 1999 and 2012. The suicide rate dropped to 1.71 per hundred thousand of population. It shows that the care systems helped the country from losing of its population from the suicide of as many as 109,750 people and also from losing the expenditure cost of care for patients with self-harm and who must be treated at psychiatric hospitals for up to 4,147 million baht. The most important is to help suffered people to be restored to a normal happy life.

The outcome was not only to reduce such losses but also caused the society to have valuable learning lessons, which reinforces that suicide is not a disease and is still a critical danger in the society. Social and cultural factors and the change of the world are all the cause of problems happened at any time.

However, suicide is preventable. It is impossible to stop learning and development to be able to keep pace with the change of the world and other factors. Khon Kaen psychiatric hospital therefore determined its focus on the units in moving forward to develop their expertise to tackle and prevent suicide as "Excellence center", including the supply of training centers for medical healthcare personnel such as doctors and nurses, and of educational source of protection study in helping those at risk of suicide in the national level, as well as acting as a mentor and academic assistance provider to the network inside and outside the Ministry of Health, and creating partnerships to share knowledge and experiences among ASEAN members. This causes the accumulation of social capital in the form of knowledge and knowledgeable people, and the widespread adoption and true elimination of this dark threat from the global society.
8. Issues of monitoring and evaluation

From the classification of the operation system, there is also the level classification of monitoring and evaluation into two parts as follows:

1) Personal level, when risk population have been found, screened for the risk of self-harm and displayed a significant risk of self-harm. They have been suggested to receive the service from health care units close to their residential places. If they have mild symptoms or are not fatal and also are able to live in the community, there still is the forwarding of the information in order to evaluate their symptoms by community leaders or health care officials close to home. At the end of the service, the conclusive results of the monitoring and evaluation report (R. Ng. 2) will be sent to the Provincial Health Office. Similarly, in the case of self-harm, after the patient has been taking physical treatment, they then will receive mental therapy, rehabilitation until they are safe from self-harm and allowed to go home by doctors. Their information will be forwarded in order to operate the home visit and evaluate symptoms to prevent the repeated self-harm by the operator who will record information into the reporting system, R. Ng. 506 DS, for referring the cases to receive constant care.

Guidelines for monitoring, care and prevention operation of suicide problem

<table>
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<tr>
<th>Community &amp; Health volunteer</th>
<th>Primary care unit</th>
<th>Primary/Secondary/Tertiary General Hospital</th>
<th>Psychiatric hospital</th>
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<td>- Search and screen people at risk by:</td>
<td>- Analyze situations and screen those at risk in community and its units</td>
<td>Analyze situations and screen those at risk in community and its hospital units such as chronic patients etc.</td>
<td>Analyze situations and screen those at risk in community and its units</td>
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<tr>
<td>- DS8 screening form</td>
<td>- Campaign for promoting mental health and psychiatric knowledge</td>
<td>- Review helping and care service systems etc.</td>
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<td>- su-9 screening form</td>
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Screening results

In case, more than 3 “yes” answers in 1-6 questions, it means ‘there is depression’.

In case, more than 1 “yes” answers in questions 7-8, it means ‘there is a risk of suicide’.

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- Assess the severity levels
In case, the score is +VE, give the mental social care.
- Should be referred to receive consulting service and meet doctors for treatment.

In the case of having –VE score, provide knowledge of mental health care
- Record behavior and be screened into the family folder to be compared

2) In the unit level, it is an evaluation about the overall number of those with self-harm, consists of the information of the amount of those with self-harm from the reports of health service facilities, mortality rates from self-harm, receiving services in various aspects of those with self-harm and continuity of receiving services.
9. Experiences gained from the operation

- **In the term of administration**, the executives of some units did not understand the benefits gained from the project and do not give importance to the issue seriously, do not provide personnel support to join operations in the area. Department of Mental Health has proposed to the Ministry of Health to determine that the suicide rate is a measure in the ministry level. Apart from this, Khon Kaen Rajanagarindra Psychiatric Hospital held a meeting to clarify the project to the executives of the units in each province to create better comprehension in the operation processes. This resulted in having the responsible / coordinator in the provincial level in the network.

- **In term of knowledge and attitudes**

1) As a project manager, during the initial period, the organization had inadequate knowledge and understanding in the behavior and nature of suicide problem. So, the solution was in the form of co-study with the local people in the field of study. This rendered the prototype model and ongoing epidemiological studies. This helps designing the project / activity / indicator determination and project’s goal to be consistent with the target group and situation of the problems the country was facing. It was found that the beliefs and attitudes of the community on suicide were the barriers for available data collection causing its inadequate use for planning of problem solving. Khon Kaen Rajanagarindra Psychiatric Hospital therefore developed a database system of those with suicide and attempted suicide by taking into account the limitations of the data providers. From the copyright of information, this caused Thailand have its own database and a database for students, scholars, researchers and those who are interested to use as a resource to study and develop it up to date even further.
2) Health personnel, physicians, nurses were not confident in the knowledge and skills of treatment, diagnosis and care of those with self-harm. So, the events in each year took the form of training for new personnel and provided continuous rehabilitation knowledge to the trained personnel. Each year, there was a survey of the customer needs towards the knowledge and skills that need further development.

3) The administrators of the local organizations lacked of knowledge and guidance to help in taking care of those with suicide attempts. In the community, people viewed that the suicide is an individual matter. This reflected weakness, inability to handle life's problems and behaviors of seeking attention from surrounding people. So, the local administrators had been designated as one of the target groups of the training participation and meeting including national project contest since 2007 onwards.

4) People, families and society have prejudice against the treatment acceptation in psychiatric units. There was the bias that having psychiatric problems including depression was a shame or nasty. When there was the occurrence of such illness, people refused treatment. Some even relocated to conceal themselves from the society. Organizing the events each year was a campaign to educate people through various media channels. The objective was to create the correct understanding of the stress and psychiatric illness, to reduce social bias toward psychiatric patients and families, and to encourage them to accept health services thoroughly and to train the family the primary care in order to reduce the barriers to access the services from the social factors.

5) The local media had a little attention to promote knowledge to the public. Most news presentation is the presentation of formidable images and message. In 2012, there was the determination of suicide tackling standard as the national agenda to request the cooperation and push journalism organizations to support the presentation of the news of happiness, knowledge of mental health, mental strength, creative communications, creating a family relationship. This included directing the channels to access to counseling services, refraining violent images and content, suicide commitment on TV, movies and other entertainment media.

10. The benefits gained from the activities

Suicide is the end result of various complicated factors. So, it is not solely a medical problem. Also, it requires the cooperation of other agencies in the society when there was the expansion of the operation’s results throughout the country under the name "Project to prevent suicide”.

10.1. There is a data collecting and analyzing system. Information obtained will be used to describe the trend of severity and the level of problem in the area. So, the solution is more consistent with the context. The "depression and self-harm monitoring model: Department of Mental Health (R. Ng. 506 DS)" and the model of information collection from the mortality certificates (Mb. 1) were developed from the approval of the responsible of mental health in each province to collect and report data. This makes a specific regional coverage and so has specification on the target group well.
It also helps to set direction of policy determination for the operation of the project, as well as determination of indicators of the project each year. Health service units can use such information in provincial operation planning, tracking and evaluating the results of mental health services. It can be seen that the plan in each province has the specific activities based on the context of problems and available resources. Besides, the community will be given actual information from the analysis. This raised awareness and sense of issue ownership leading to planning and resolving the issue seriously.

**Figure 7:** Database for monitoring people with depression and self-harm behaviors (R.Ng. 506 DS), Thailand

10.2 There is the set of specific knowledge and technology. Its users consist of health personnel and the general public. The technologies in the forms of document, manual, teaching plan, video, VCD are developed to the forms of e-book (Figure 8). So, the health personnel can study themselves to develop their skills in social and psychological aids which are specialized knowledge. It requires a development training format according to participatory learning (PL) and knowledge restoration project very year. There is the evaluation of user’s comments of technology periodically to improve the content to be modern and easy to use.
10.3 There are evaluation and screening tools for depression and risk of suicide for health personnel, community leaders, volunteers and the public constantly to use in self-screening, or close people with the risk of suicide. It allows them to access services and get help in time. In fiscal year 2003, Khon Kaen Psychiatric Hospital has developed the screening test for depression (Questionnaire, 15 questions), and the screening test for risk of suicide (Questionnaire, 10 Questions). When they are applied to use in real situations and also evaluated from of user's query (health personnel in each service unit), it was found some limitations of the tools. There is a need for screening test with fewer questions and is easy to use in the community. It therefore developed the screening test for depression and risk of suicide (DS 8) in fiscal year 2008 (Figure: 8).

This resulted in a population at risk be screened and those with self-harm attempt efforts have been found, screened and taken care continuously and completely according to the set targets in each fiscal year. When there is the re-evaluation of the comments of the health personnel, it was found that there was a need to reduce the number of questions for those at risk of suicide. In fiscal year 2010, Khon Kaen Psychiatric Hospital thus developed the screening tool for those at risk of suicide (SU-9), which has been recognized and awarded for excellence in 2011 academic conference, Ministry of Health.
10.4 The development of service system is established according to determined guidelines from the results of the reporting system from various levels of service facilities in each province. It was found that in fiscal year 2007, the care system throughout the country had the health care service units to assist those at risk for suicide that met the number of set targets including 100 % of secondary and tertiary general hospital, 85 % of primary general hospital and 65 % of primary health unit. In addition, each facility had clear guidelines to assist those at risk of suicide.
Figure 10: Clinical guideline in helping people at risk of suicide of the Public Health Service

<table>
<thead>
<tr>
<th>The responsible</th>
<th>processes of operation</th>
<th>Activities/document</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor/ER</td>
<td>Patients with suicide attempt</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Treatment Physical problems</td>
<td>Suicide risk assessment tools</td>
</tr>
<tr>
<td></td>
<td>-Evaluate Suicide Risk</td>
<td></td>
</tr>
<tr>
<td>Doctors</td>
<td>high risk yes referred to Tertiary Hospital</td>
<td>Follow up 6 months</td>
</tr>
<tr>
<td>ER</td>
<td>IPD-case no OPD-case Mental health Counseling center</td>
<td></td>
</tr>
<tr>
<td>WORD</td>
<td>Monitor Repeated Suicide Attempt</td>
<td>Suicide risk monitoring tools</td>
</tr>
<tr>
<td>Doctor</td>
<td>Provide appropriate Interventions</td>
<td></td>
</tr>
<tr>
<td>Health Building Clinic</td>
<td>Depression and suicide assessment</td>
<td></td>
</tr>
<tr>
<td>Doctor</td>
<td>high risk yes refer to Tertiary Hospital</td>
<td></td>
</tr>
<tr>
<td>Doctor/WORD</td>
<td>Plan to discharge the patients Assess mental health before discharging</td>
<td></td>
</tr>
<tr>
<td>WORD</td>
<td>Send the name list to Medical statistics center</td>
<td>Refer to Primary health care unit Home visit program within a month</td>
</tr>
</tbody>
</table>
10.5 The number of health personnel in the service system in 2004 was found nationwide. In fiscal year 2006, there was an assessment of the service of health personnel. It was found that physicians who had undergone a total of 76 people identified as having experienced in taking care of 25.0 per patient in average. The popular drugs against sadness that doctors used were in the group of SSRI. The mark of health personnel who were confident in counseling was at the level of 2.7 points (total score: 5 points).

10.6 In the term of cost worth, having compared the rates of suicide during the fiscal years 2001-2011 (FY 10), it found that the suicide rate decreased to 1.71 per hundred thousand of the population. Compared with the population in the fiscal year 2004, it showed that this helped the country not to lose its population from suicides, approximately 109,750 people, also helped the country not to lose the cost of care for patients with self-harm or need of treatment in the psychiatric hospitals by up to 4,147 million baht. The most important was that to help those falling in suffering to be restored to a normal happy life and creates the happy society.

11. Passing on

11. There was the continuity of the project "SCSL" of the department of Mental Health from 1999-2012 by the budget allocation for research, operation improvement, result extension, and pushing them as target of work (KPI) in the ministry level. This caused monitoring system of depression and self-harm. As a result, the rate of suicide of Thailand was in 58th rank of the world and the rate remained stable at 5.9 per hundred thousand of the population (2007-2010).

The results of the constant services to those with self-harm and continuously monitoring for those with attempted suicide since the years 2010 - 2012 were accounted for as 97.53 to 97.66 %.

After the year 2011, there was the reduction of financial support from the Department of Budget, Department of Mental Health from 10 million to only 5 million baht per year and the support was terminated in 2013.

However, Khon Kaen Rajanagarindra psychiatric hospital still continues to analyze the results, circumstances of suicide from the warning system in Thailand and work to recommend the relevant policies because the area that still has a problem of suicide has submitted the information to the system and many areas are strengthened in the continuous operation of local personnel such as Kamphaeng Phet, Phang Nga, Lumphun and Kalasin etc. due to the benefits in their operations. The operation is considered as routine and there is the request for the approval of funding from the local.

In the social sector, a group of suicide survivors and family members of completed suicide patients has been established in Chiang Mai province in the name ‘Mind Candlelight Clubs’ since 2010. Today, it has expanded the activities of the club to the other provinces as the same network by the club members. In addition, there was the organizing of creative activities to mentally heal each other such as home visits and it served as a lecturer sharing experiences to people wishing to commit suicide to realize the value of living in society.

The operation format, successful work experience, problems, innovation, technology and knowledge such as a screening test have been exchanged, studied and adapted to use in various regions. There was the work presentation in the National Academic Conference and it was awarded as the Academic Excellence in Conferences, Ministry of Health, 2011. There was the
presentation of the academic work in the Beijing International Association and finally it won ‘Lee Award’, 2011.

For reforming the health system, the Department of Mental Health has put Roadmap to Khon Kaen Rajanagarindra psychiatric hospital as Excellence in the term of its expertise to prevent and resolve to suicide problem. It is a way to develop academic knowledge, technology to support the local, service units including supporting the public to have knowledge / understanding, technique, modern tools that comply with modern requirements to protect and assist those at risk of suicide sustainably.

12. The key of cooperation with teamwork, using existing mechanism adjusted in the way of thinking or a new way resulted in having the solutions which are different from the original version.

Learning from 13 years of operation that there has been continuous monitoring is the mentally valuable work, helping people with no choice to live. Despite the lessons learned from ignorance, the model was developed in order to be expanded its usage nationwide. It has helped to reduce the loss of individuals and family members, which is worth for the dedication of the team; even if, there are obstacles and limitations of budget support.

But with confidence in the concept, the problem of suicide is not a "disease", but it is protectable. The concept of STOP began at the time when the systematic work with the same heart, having the support of modern tool, ongoing, relentless forward with clear goals, all of those involved are meaningful and important of partnerships in work cooperation under the proved data that has a demonstrated facts and having the manual and academic knowledge developed to be easy in use.

S System: there is the obvious pattern and operation connecting the path between the care service units and communities.

T: Team and Technology, Team work with the same heart supported by modern tools.

O: Ongoing, Continuous work, non-stop and having a clear target to work

P: People, being aware of the groups of people needed to take part in the work.

Having looked back and reviewed the limitations of the work and stepped forwards in the future, there are several important issues as follows:
1. Many of limitations of the problem such as weapon access, cooperation of news presentation of the media, inattention of society on importance of relationship within the family, controlling of selling alcohol and additive drug for youths and problems of abandoning the elderly to live alone in society are the social obligations that cannot be neglected or ignored. Especially, the view that the problem of suicide should be reduced its level of importance until it disappears from the society, the operation will not be continuous. These limitations will give the results in that the problem of suicide will be returned as a new starting point and become more severe from the original.

Therefore, it is necessary to continue the operation. That is, a management system should have the shifting of personnel to maintain a system to protect and care of those with suicide attempt. There should be the additional personnel development to replace those who are migrating or get a new job, including non-stopping to develop knowledge in relation to the issue of suicide according to social context of Thailand. The national policy has announced the issue of suicide as one of the indicators of life quality of the population of Thailand that all organizations involved need to monitor constantly.

2. The family system is extremely important on decisions and pushing a person to commit self-harm. Having reviewed the past operations, it found that in Thai family, there still is a gap, estranged relationship, a lack of communication between family members. There are no clear agencies that have hosted the event or take care of this issue. The cooperation of the media is not enough to reduce emotional factors. It is a social point that society should realize its importance, which all sectors should cooperate to solve the issue to achieve the success in helping suffering people and the survivors of suicide in society to live happily.