Quality of Children's Life 2013

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Preface

The Book entitled “Quality of Children’s Life”, First Issue, is published to respond to the core mission of the National Institute for Child and Family Development, Mahidol University as a main academic institute for the organized development for the quality of children and youth’s life, and the Institute holds the academic database, comprising research and technical papers written by experts nationwide, and attains the achievements under the intent specified in Section 19 of the National Child and Youth Development Promotion Act, B.E. 2550. In the preceding year, the Institute marked an historic event in accordance with Section 19(3) in the development of personnel competence in connection with child and youth, resulted by cooperation between the National Institute for Child and Family Development, Mahidol University, and the Office of Welfare Promotion, Protection and Empowerment of Vulnerable Groups, Ministry of Social Development and Human Security, and many other network parties regarding child and youth. The improvement of “The 2013 Quality of Life of Children” Book, which is the first issue, is another substantial mission making the process for the quality of life development of child and youth carry out under the standardized database. This mission has been eagerly supported by Thai Health Promotion Fund (ThaiHealth) and a large number of experts participating in our working team, led by Ajarn Sirsak Thai-aree, Chair of the National Commission on the Promotion of Child and Youth Development and his team.

We hope that “The 2013 Quality of Children’s Life” Book benefits you all as the personnel working for the quality of life development of child and youth, as well as any other authorities and organizations working for child and youth. The Institute makes a commitment that the books relating to the quality of life of children will be issued every year to present academic analysis, synthesis, and research in connection with child and youth according to the circumstances on that year to further benefit the child and youth development.

Dr. Suriyadeo Tripathi
Editor and Director
National Institute for Child and Family Development
Mahidol University

Contributors: **Quality of Thai Children's Life**

"Every Thai child should have chance to grow up in an environment maximizing his development in 4 domains: physical, mental, social, and intellectual to be a perfect human-being full of competence and human value, and to be a smart, good, and happy man."

Professor Emeritus Dr.Prawase Wasi, M.D.
Committee chairman of National Health Foundation

- "To receive good rearing and care by the parents.
- To have chance to grow up with both physical and mental strength, welfare, and safety.
- To obtain an appropriate education.
- To obtain medical and public health services.
- To have suitable behavior based on the child's age.
- To be a child with good thought, conduct, and ethics based on the Thai culture."

Professor Emeritus Chanika Tuchinda, M.D., MS, FAAP
Consultant to the Dean, Faculty of Medicine,
Siriraj Hospital, Mahidol University

"I want to see Thai children to have growth according to their full competence of inheritance, physical body, intelligence, and mind. Every range of ages is important, and the children's needs at each age are different, either in term of nutrition, exercises, care for accidents, rearing, offering of love and warmth, and brining-up.Do not let the time go by without responding to needs of children at each age by our full capacity."

Prof. Ratchata Ratchatanavin,M.D.
President of Mahidol university

"Thai children and every child living in Thailand are collectively reared in contexts of survival, protection, development, and participation suitable for their ages so that they have perfect physical health, and strong psychological health, warm-heart family, good intelligence, eagerness for learning, critical thinking, proper and right decision-making, creativity and leadership, morality and ethics, nice behavior, responsibility, cultural base, relationship between ages and attributes leading to the career development and self-reliance in the future, and they will be the qualified citizens taking part in the social development process."

Srisak Thaiarry
Executive Director,
National Council for Child and Youth Development

"For the quality of children's life at the present age, the children must be strong, good, and happy while they must also acquire the life skills. All these must be combined together so that the children will have self-reliance and honest professions. But, it's not enough to consider this dimension only, the children must engage the association skills, and change their lifestyle to respond to the global changes and existing technologies appropriately."

Krissada Ruangareerat,D.D.S
Chief Executive Officer,
Thai Health Promotion Foundation

"The quality of life of children must be considered cohesively including physical body, mind, intelligence, emotion and society for their all-around development and balance.
Physical body – Have the quality food, be smart to select good food, have immunity, and do exercises.
Mind – Have morality and ethics, service mind, generosity.
Intelligence – Seek for knowledge by themselves, have organized thinking process, plan and solve the problems by themselves.
Emotion – Be happy, adapt themselves to the society, accept differences, accept social rules, and participate in forming the social regulations.
Society – Join the group and work with others, have co-living skills, accept differences, be smart children."

Kua Kaewkate
Director of Young People Development Centers (YPDC)

"The quality of Thai children's life is resulted by 2 substantial factors. The first factor is the children's inner quality constructed by themselves. The second factor is the good social system. Everyone in the society has one collective duty to bring up Thai children to become the quality children. This does not mean that they just acquire new academic knowledge, but they must know their selves, comprehend the world's changes, known the environment and people in the society, love their working, and have the service mind under a belief that their lives would be better if they do not ignore, but build better things for their own happiness and environment."

Somsak Chunhara, M.D.,M.P.H.
Director and Secretary General,
National Health Foundation

"For the desirable quality of life of Thai children, all families, communities, and schools must take roles in giving safety to children, and promoting or stimulating their development based on their ages. If any social circumstances cannot perform any roles, the State must set up the mechanism to manage, solve, or re-arrange those circumstances. If they cannot be healed, a new environment must be offered such as replacement family. These actions certainly need the management."

Samphasit Koompraphant
Committee and Secretary general,
The Center for the Protection of Children's Rights Foundation

"A child's quality of life starts in a warm, but strong family who has good understanding in child-rearing, arranging valuable and appropriate activities for the child. If the family is not ready, other institute or agency should offer help or care. The school should arrange the learning climate and environment allowing the child to have various learning, to strengthen the child, and arrange learning activities that challenge and develop the child's abilities, interest, and pride in both co-curriculum and extra-curriculum. In the community, society, and environment, there should be some learning sources to be used by the child and his family, e.g. library for children, activities in parks, learning museum, space in temples to construct the learning sources, and learning sources via social media."

Yongyud Wongpiromsarn, M.D.
Senior Expert Head of Advisor Group,
Department of Mental Health, Ministry of Public Health

"There are many questions if we can put the future of our society into the care of children at the present generation or it is called "ME ME ME generation" because they are keen on and stay in their individual world. In the future, when the technological growth is unlimited, there will be a terrible gap of thinking quality and conscious mind, which is called the thinking technology that these children cannot follow. Therefore, we must employ our eastern social, cultural, and intellectual capital we have to connect and support our Thai children so that they grow up with a new quality of conscious mind that the happy co-living in the society is the life target. This is the working called "Work of Hope"

Assoc. Prof. Vilasinee Adulyanon, Ph.D.
Director of social marketing and media advocacy,
Thai Health Promotion Foundation

"A child acquiring the quality of life must have a balance between the roles of consumer and creator. Creation is a dimension of human being as the nature awards the creativity potential to humans more than other creature. At the present age, it's a challenge that "despite no creativity, we can live by doing nothing, but waiting for consumption, and this is a wonderful life. This deems Micchaditthi or false view" A child's good life means rooting a good foundation for all life. The child must acquire full potential development to tackle his obstacle, and resist the bad power dragging him down or resist the wrong inducement. To rear a child, we must understand this issue to overcome this wrong inducement. The process at each age may be different. During childhood, the child must have some weapons to resist the inducement for his whole life. The child's quality does not depend on his pleasure. For the quality of life of humans, our life should not be set as the center. To develop the child's quality of life, he must be trained to understand other people, understand the virtue and purity. If the child is centered, he cannot see anything above him, or be able to understand what is superior in respect with the world, universe and virtue, or understand how to do anything for other people. We must train the child to know and understand the roles of giver and taker."

Prof. Vicharn Panich, M.D.
Chairman of the University Council of Mahidol University


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ัฒนาต่อเนื่องสิรินธร เวลา 14.00–17.00 น.
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QUALITY OF CHILDREN'S LIFE IN THAILAND

The Convention on the Rights of the Child is an international human right treaty most agreed in the world as it is ratified by every country, except Somalia and America, and by Thailand in 1992. This Convention specifies the basic rights every country must secure any and all children in its country. Such basic rights include the rights to survival, basic health care, peace, and safety as well as rights to development, which involve the care by warm family, opportunity for good and proper education up to ages, and proper nutrition.

It is apparent that the life quality development of a child involves many persons, starting from that child, caregivers, school teachers, neighbors in his community, hospital where the child sees the doctor, police, prosecutor, and court, etc. who shall protect the child. It may be said that, in general, the life quality development for children consists of 3 levels in the structure of development system:

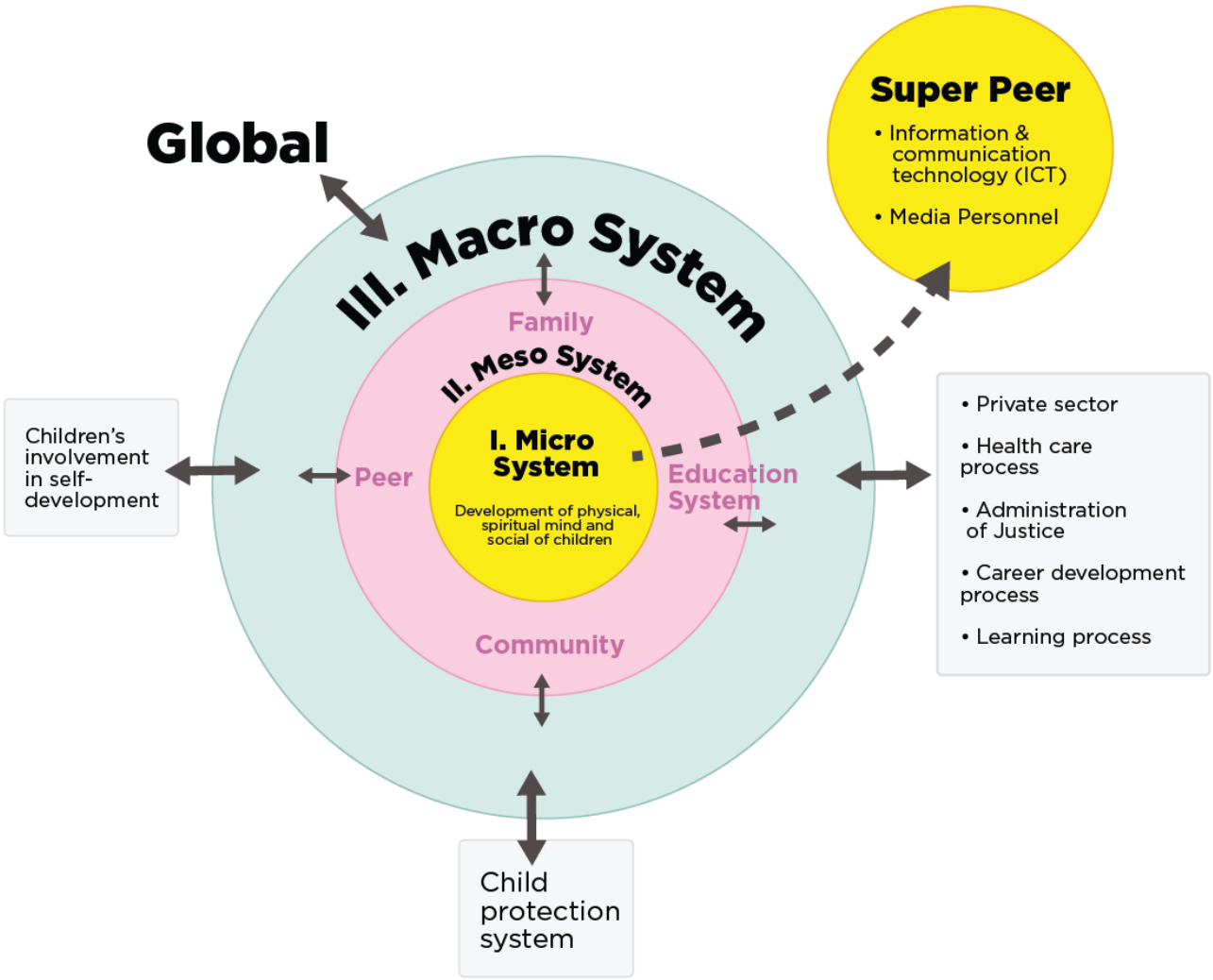
First Level: Individual level (micro system) – The system focuses on development of self and quality of life of children.

Second Level: Social and environmental level influencing children (mesosystem) – The system presents the linkage and interactions between family, school, community, and peers to enhance the development of the quality of life of children.

Third Level: Community and social structure level (macro system) to be consistent with Thai contexts for the development of the quality of life of children.

Furthermore, the factor affecting and greatly influencing the development of the quality of life of children is every type of information technologies, as well as important persons dealing with media at all levels, which reflect the interactions at the micro system, mesosystem, macro system, and global level. This factor puts large influence to children because it approaches the children rapidly at everywhere and every time or it may be called "Super Peer".

Figure 1: System of Child Development from the micro system to the macro system through the process and national mechanism



Note:

1. Micro system, mesosystem, and micro system mean the development process from the individual level, social and environmental system around children, and community and social structural level respectively.

2. Child protection system comprises the prevention, protection, and promotion.

Problems, obstacles and 3 levels of supportive factors for child's quality of life development

1. Micro system.

The development of life quality of children aims at cognitive skills, life skills, and good attitude toward themselves and their surrounding society. Thailand, by the National Institute for Child and Family Development, Mahidol University, has developed a self-assessment tool called "Thai Children and Youth Life Assets". In a survey by the Ministry of Education in 2009, the general life assets of children in the educational system were at the fair level. Thailand's talented students got lower average life assets scores than the national scores. This signifies the development problems and hindrance of Thai children who are keen on studies only, but so far from the way of life, learning, cognitive skills, life skills, and conscious mind, which could be used to cope with all kinds of problems, hindrance, and risky behaviors. Thai children are short of life assets; this must be improved immediately.

2. Mesosystem.

Family

Several areas in the country now encounter the condition of middle indented family; the grandparents rear the grandchildren. The number of divorced families has been higher; so the parents are no longer key persons for child development. Even the hard-working families, they must reduce the role of close care for children in the midst of love and good relationship. These families concern about earning for living until the parenthood is ignored. As a result, they insert ideas that the children should attain high education. They rear children subject to the capitalism concept. The parents provide everything for their children, but they misunderstand between the meaning of love and rearing children by urging them to study hard, but no associations, no love, no self-esteem or sympathy with each other, no occupational skills, and no interaction skills with the community. This is deemed the absolute failure of thought and attitude in child development for the family unit."

School

The basic educational system developed to become a single educational mode across the country causes the stress under the knockout system. The evaluation for teachers and students, which is absolutely far from children's way of life, drives more and more children to stay away from the educational system. The PISA result points out that Thai children's quality has gradually dropped, resulting to children's deficient analytical thinking, no linkage, and no knowledge about local wisdom. This educational system becomes the main problem blocking the brain development to love the learning that can lead to the development of life skills, occupational skills, learning, technology, and good attitude toward themselves and society.

Community

There are no coaching system in the community, participatory activities, or tangible local children and youth development plans under participation of all related sectors. As a result, the local people live separately without the social mind for the development of community members.

"A weak community with no participatory management system or not recognizing the value of community children will cause many consequent problems, and will become the failure in the development of the quality of life of their community children."

Peer

Peers greatly influence children and adolescents. As children and adolescents are sensitive to stimulus in the emotional brain, and weak in cognitive skills, but they imitate with each other in an instant, this is another deficient system. A peer should persuade others to make merit, and be good friends.

3. Macro system.

1) Child protection system: an essential system, but never established.

"Child protection system is the answer of protection, either children or their surrounding factors, which must function perfectly. If a country places a clear concept that, "children must be protected and cared" rather than victims wanting some help, this thinking system will change the paradigm and viewpoint to children. The child protection system is the macro system resulting to the micro system at all levels. It is the macro system strengthening all micro systems because it's complete in itself, and covers three main issues:
1) prevention; 2) protection; and 3) promotion.

Samphasit Khoompraphant

For example, in case of children and substance use, if people in the country think that the children should be protected, the community will do endeavors to prevent them from substance use. The school takes a role in rooting the right thought in children whereas the family plays a role of immunity for children from the first step by communicating the right understanding between family members. There are at least 4 main hosts: Ministry of Justice with duties of law issuance and caring for the family, school and community with a duty of preventing the substance use; Ministry of Public Health with duties of promoting family health prior to birth and provoking the strong health in the family since the first step; the educational system with a duty of strengthening the schools; and the private sector with duty of driving for changes in the society to be ready to protect its children such as pressing for the enforcement of child labor protection, etc.

2) A system for the development of children and youth leaders in the loose network.

For example, Children and Youth Council, at the regional and central levels in accordance with the National Child and Youth Development Promotion Act, B.E. 2550, has no precise direction for the participatory management system, for representing all groups of children, including children in the non-formal educational system, children in difficult conditions, and for connecting the network in groups of children and adults. As a result, the Child and Youth Council loses the efficiency to represent or lead for some changes, or create the positive peer-to-peer power for wider outcome. In contrast, the political mode is used in the mechanism of the Child and Youth Council. Meanwhile, the children with risky behaviors, either violence, narcotic network, tobacco, or liquor have expanded so quickly if compared with the positive-power network like Child and Youth Council, which is still weak, rudder, deficient, and absorbs too much power system that the peer-to-peer network could not be developed. Adversely, the peer system, e.g. liquor group or tobacco group in universities, violence group in various forms, bad-model public people is expanded widely that takes huge effect to the children and youth development of Thailand.

Human resource, particularly children and youth, is the most important resource impossibly ignored by the government. Only investment in the economic infrastructure is inadequate; it is so essential to make investment in all 3 levels of human resource development, starting from the individual level (micro system), social level (mesosystem), and community and social structural level (macro system). Without this kind of investment while the social and cultural storm (hot cognition) is approaching, it will wipe out the cognitive skills, good consciousness, cohabitation, honest livelihood, and nice living city in children's views, how will we be responsible for this hot cognition?

Suriyadeo Tripathi

The problems, hindrance, and failure, at any levels, of the mechanism for the development of the quality of life of children will soon become the social and cultural storm of this country. They will be the hot cognition spreading rapidly, and finally the domino effect or so complicated that it may be tackled difficultly.

The first issue of the Quality of Life of Children Report by the National Institute for Child and Family Development as sponsored by the Thai Health Promotion Foundation (ThaiHealth) contains the synthesis of child situations at all ages and groups and in various domains. Such analysis pinpoints the strength, weakness, development opportunities, and case studies rippling in the Thai society to be our lesson-learnt. Both components will be used as the database to determine the development of the quality of life of children in line with the social and national reality.

The last section of this book is our invitation to any and all organizations, either in the government sector or private sector, other related agencies to challenge for changes in form of policy-based proposals, synthesized from hot issues, facts, empirical evidence, case studies, and international information.

By
Suriyadeo Tripathi
Wimontip Musikaphan
et al.

HEALTH OF INFANTS IN THAILAND

Thai Children's Development

When considering the current circumstances, if compared with those for 30-40 years ago, it seems that our world has achieved great advances in many areas, especially technological advances linking more people together. However, higher number of populations as well as the change of social structure deprives the family members' interactions. Especially, in Thailand, more people from rural areas immigrate to work in cities; the duty of child-rearing falls into the grandparents or baby sisters. The aforesaid matters take the great effect to child development because the populations' intelligence quotient (IQ) is related to the national development potential. It was found that a country whose populations' IQ was high, its gross domestic product would be high as well, and its economic development rate was usually higher than the other country with low IQ populations. From the intelligence survey in Thai students in 2011 by the Department of Mental Health, Thai students' IQ points were 98.59, which is lower than the international standard. In addition, according to the emotional quotient (EQ) survey in Thai children, their EQ, on average, was lower the standard criteria in 3 components: virtue, competence, and happiness. Such information indicates the developmental problems in Thai children, which will critically affect the national development in the future.

Intelligence Quotient Surveys in Thai Children

The Tenth National Economic and Social Development Plan (Year 2007-2011) placed the strategy for human quality development and community strength. Intelligence quotient (IQ) is a factor enabling Thai people to be strong and to develop their intellectual abilities to meet the international standard. The planning for right and appropriate human development is, therefore, so essential. According to the continuous surveys and studies on IQ and development of Thai children, it was found that, subject to the study of Lynn and Vanhanen, Thailand was ranked the 40th in the total of 113 countries and it was reported that Thailand's average IQ was 91.

The above data led to the survey of intelligence quotient in Thai students in 2011, which involved 72,780 students. The survey tool was the SPM (Standard Progressive Matrices): Parallel Version, which is a reliable tool. The survey results are as follows: Thai students' IQ was 98.59 on average whereas some Thai students with IQ higher than 100 stayed in 18 provinces or this accounted for 24%. The province where the students achieved the highest IQ was Nonthaburi at 108.91 points. The normal-IQ students or those acquiring 100 IQ points lived in 20 provinces, which represented 26%. The students with under-standard IQ or IQ lower than 100 points were scattered in 38 provinces in the southern and northeastern parts of Thailand or this accounted for 50%.

It is obvious that most newborn babies during the past 6-10 years got the IQ points lower than 100; these babies were born during the IMF period. However, the babies born before such period got better IQ points, and the girls had higher IQ than boys. In addition, the school-age students with IQ points lower than 100 were born during the IMF period while the children born before that time had better IQ points.

The girls usually had higher IQ than boys. Besides, the school-age children with IQ points lower than 100 were mostly found in Grade 1-5 students. Another difficult group was a group of students engaging IQ points less than 90 or it accounted for 28.4%. In this group, 6.5% of them suffered the intelligence impairment. The high-IQ students were usually found in the good-economic provinces.

The development of child intelligence must involve several components, including good health, merit and morality, and happiness. This means that if a child has good health, his brain will function well. The good functioning brain leads to the good health. Therefore, the brain development is a crucial factor enriching an individual's potential, future, and quality of life. The brain development should start **before** the fertilization. Any experience a child receives certainly leads to his brain development. Other brain development factors include the good nutrition, proper relaxing, health care, playing, art, music, talking with anyone who loves the child, and nurturing and having models of good humans to root the human nature in the child so that he engages the integrated development. We should provide good activities for the child such as child activities to offer him some experience in people and environment by considering the child's cohesive brain development.

Except the importance of nutrition to the child's intelligence, sleeping is so important for his development, intelligence, and learning. A child should sleep at least 10-12 hours, and he should have the sound sleep because his brain can systemize his learning and memory while sleeping, which will be useful for his working memory. According to the research on sleeping in Thai children, they, since their birth, had less sleeping than the standard sleeping time for 2 hours, which definitely took effect to the immunity, mental health, occurrence of accidents, and health problems, e.g. diabetes, heart attack, and obesity. A study from Japan pointed out that the children going to bed after midnight would have aggression, moodiness, and crimes.

The brain development factors include the heredity, nutrition, and environment that stir the brain structural development, working development, and behavioral development. The formation of nerve cells must involve some protein, iron, iodine, fatty acid, folic, and, importantly, the experience or what the nervous system receives as the child is still in his mother's womb up to his adulthood. If the child's brain development is aroused during his first 6 years of life when a large number of nerve cells is forming, that child will acquire an efficient learning, learning potential, working, marriage, and life success.

Child's Nutrition

The child growth and nutrition are national economic indicators. In the developed countries, the children tend to have the overnutrition and obesity. The height of children there has been changing so slightly because they engage the full growth potential. This is different from children in other developing countries where the children's height may be greatly increasing if they receive the good nutrition and care. For example, for the school-age children living in Hat Yai municipal area, the new-generation children are taller than the old-generation ones for 1.25 cm/year-Birth cohort. According to the nutrition surveys in Thai children for the past 10 years, it was found that they gained more weight and height.

Thailand is globally praised as a good example country so successful in wiping out the nutrient deficiency, that is, the nutritional deficiency in the country is lower and the severe malnutrition (Level 3) is rare and hardly reported. However, some underweight and short children may be sometimes found in poor and under-privileged children. Adversely, more Thai children suffer the overnutrition and obesity, which result to some non-communicable chronic diseases in children and adults. These all ruin the human resource quality of the country in the future. Subject to the research evidence for the past 2 decades, they have pinpointed that food and nutrition at the primary stage of life are so essential for health in the long term. **The present research results also indicate that the malnutrition, especially during the first year of age, is an important factor obstructing the child's development and intelligence. As a result, the child has the delayed learning, sluggishness, low IQ, and immunity disorder, which cause the child to feel sick frequently, long, and severely, and when he grows up, he has chance to have more non-communicable diseases** such as diabetes, high blood pressure, cardio-vascular diseases, chronic lung disease, and cancer during adulthood. As one's body is accustomed with receiving little food during childhood, when he grows up, he is more risky than general people to have the overnutrition and other non-communicable diseases.

Importance of Nutrition to Child Development

1. Factors influencing child development

The studies supported by UNICEF and published in Lancet series on child development in 2007 and 2011 reveal that there are 200 million pre-school children around the world who are unable to engage their development potential due to poverty, inappropriate child-rearing and development encouragement, and bad health. **Based on the analysis, some causes of bad health that may be stopped are malnutrition, iodine deficiency, iron deficiency, as well as appropriate child-rearing and education to encourage the child's development. If the parents, family, child care center, and school have good knowledge and understanding, and educate the child, his development will be stimulated appropriately.**

Moreover, based on the survey in 2011, there were other factors relating to the child development:

1) Risk factors caused by an improper growth in the womb, genetic disorders such as Thalassemia frequently found in Thailand, or other risk factors due to the mother's old age during pregnancy so the child has the Down's Syndrome, malaria infection, receipt of lead, HIV infection, depression, family violence, and improper encouragement for children in the child care centers, etc.

2) Preventive factors, which include the receipt of breast milk at least 6 months, and the level of education attained by mothers.

2. Nutrition affecting the intelligence quotient and brain functioning.

These should be studied and monitored from the prenatal to the postnatal stages and up to adulthood. The long-term study shows that, in case of severe malnutrition during childhood, the IQ points of children aged between 8-10 years would be lost for 3-10 points. It was also found that the growth of Thai pre-school children was below the standard criteria for 6.3%; this is based on Thai standard criteria. But, subject to the World Health Organization's standard, 13% of pre-school children younger than 6 years of age did not engage the standard growth.

Therefore, the World Health Organization's standard criteria should be used to assess the nutrition and intelligence quotient of Thai children.

3. Iodine nutrition in Thai mothers and children

According to the studies, the iodine deficiency affects the intelligence quotient most. The best prevention is the iodized salt supplementation. It was found that the chronic iodine deficiency deprived the intelligence quotient for 12-13.5 points. For the present iodine nutrition in Thai mothers and children after the implementation of iodized salt measure in pregnant women by giving iodine, iron, and folic supplement tablets since 2010 and by universal iodized salt since 2011, it was found that the iodine deficiency in pregnant women decreased from 52.5% in 2010 to 39.2% in 2011. If this measure continues until a pregnant woman receives the iodine sufficiently, the fetus's brain and body organs will be fully developed. If the mother feeding her breast milk to her child gains some more iodine, the child's brain will be developed greatly. Therefore, the iodine deficiency result is consistent with the survey result for Thai children's IQ, especially those in the northeastern region who had the low IQ, and a plenty of people in this region had the iodine deficiency. Moreover, subject to the 4th National Health Examination Survey in 2008-2009 regarding the degree of iodine from examining the urine of children aged between 2-14 years, it was found that 34.8% of them had the iodine deficiency. If the iodized salt supplement measure is continuously carried out by the Ministry of Agriculture and Cooperative, and the Ministry of Industry, this problem will be eradicated (Report from the 4th National Health Examination Survey in 2008-2009, Vichai Ekplakorn, Editor).

Prevention and Control of Iodine Deficiency Disorder

Iodine deficiency disorder affects all groups and all ages of populations for all life time. In particular, from fetus up to the age of 3 years, if a child had the iodine deficiency, his brain will not acquire the complete development until his cleverness or intelligence quotient drops for 10-15 points, which impairs his learning and physical growth. According to the survey of development in children younger than 5 years done by the Department of Health, Ministry of Public Health, Thai children's mature development has been decreasing. In 1999, the mature development stood at 72% and 71% in 2004. But, such mature development dropped to 67% in 2007. The survey of IQ in Thai children at ages of 6-14 years by the National Health Examination Survey Office, Health Systems Research Institute in 2008-2009, their average IQ was 91 points (normal IQ is in the range of 90-110 points). One cause of the child's immature development is that his mother receives iodine insufficiently during pregnancy. From Year 2006 to Year 2010, the proportions of pregnant women with iodine deficiency (iodine degree in the urine was lower than 150 micrograms per liter) were 71.8%, 61.3%, 58.8%, 59% and 52.5% respectively. Although this situation in 2011 seemed better as the proportion of pregnant women with iodine deficiency was at 39.7%, such proportion in 2012 increased to be 46.4%. This means that the situation is still unreliable. The campaign must be conducted continuously to educate all related persons about this problem; although the use of iodized salt in Thai households in 2011-2012 covered 93.5% and 95.8% of all households respectively.

Salt iodization for humans and animals is the effective and sustainable strategy to ensure that iodine would be sufficiently consumed in each household and individuals. The universal salt iodization is a sustainable problem-solving, and provokes the long-term results. To remedy the iodine deficiency disorder by consuming sufficient iodized salt every day, it prevents several results caused by iodine deficiency. From the sampling surveys on iodized salt quality at manufacturing sources, distribution sources, restaurants, households, schools, child care centers twice a year on June 2011, there were 56,584 iodine communities/villages in 49 provinces entering this process or it accounted for 74.5%. In 2012, the Department of Health in collaboration with the Health Center 1-12, selected some iodine communities/villages whose leaders or village volunteers had abilities in transferring knowledge to their community members, and sharing their learning with other communities, and also selected the local innovative communities carrying out iodine deficiency control and prevention continuously. These selected communities were developed to be the iodine community/village learning centers by considering their work performance in the National Iodine Day on June 2012. Up to now, there were 72,766 communities/villages in 71 provinces participating in the iodine community/village development process or this accounted for 94%.

The iodine deficiency control and prevention program is one important national measure that must be improved. To attain the objective of eradicating the iodine deficiency from Thailand, this measure must be implemented regularly and sustainably, and it needs the integration and cooperation from all related agencies in the ministerial, department,

and local administrative organization levels as well as other related networks to campaign and educate the public about the importance of iodine, and the consumption of salt or iodized products to prevent the iodine deficiency. Therefore, the Department of Health by the Bureau of Nutrition launched the Multi-Power Builds Nation Program: No Iodine-deficiency Mothers and Children by arranging some activities to improve the quality of life of Thai people so that they will be the significant manpower for the national development.

Supplementary Measures

1. Pregnant women and breast-feeding mothers need more iodine than general people. There should be the policy of giving iodine, iron, and folate supplement tablets to every pregnant woman during her pregnancy period and 6-month breast feeding period pursuant to the privilege of caring for pregnant women. The Government Pharmaceutical Organization is able to produce these tablets.

2. The iodization in drinking water should be done in isolated and remote areas according to the HRH Princess Maha Chakri Sirindhorn's Projects for the Development of Children and Youth in Isolated and Remote Areas.

Operation Plans in 2013-2015

1. To arrange the meetings of the International Council for the Control of Iodine Deficiency Disorders; to monitor the project operations; and to hold the meetings of 4 Movement Sub-committees for the Control and Prevention of Iodine Deficiency Disorders.
2. To survey the prevalence of households across the country, which use the quality iodized salt.
3. To have a sampling survey on the maternal urinary iodine concentrations of pregnant women, pre-school children aged between 3-5 years, and elderly.
4. To move "iodine communities/village", and to shift their quality to be "iodine community/village learning centers".
5. To improve the potential of iodized salt entrepreneur association.
6. To make the annual campaign on the occasion of the National Iodine Date on June 25.

4. Iron Deficiency Anemia

Iron deficiency anemia in infants and pre-school children may deprive their intelligence quotient for 5-10 points, and 0.4 points in older children. Iron deficiency causes the children to be fatigue and inactive, have no concentration and bad memory. For this disease during adulthood, one-thirds of working ability will be lost. It is obvious that the iron deficiency can take effect to people at every age. Subject to the prevalence of anemia in Thai children, the survey in the child clinics shows that:

• Infants at the age of 6 month to 1 year. It was found that 36-39% of these infants had anemia, and 13-26% of infants had iron deficiency anemia. But, if an infant is fed by the breast milk only while the mother gets good advice on food and iron supplement tablet, iron deficiency anemia will decrease to 4.2%. The health service completely operated under all existing resources and tools can help the children gain iron sufficiently, and their brain will have the complete development.

• School-age children. It was found that 18-27% of these children had anemia. 18% were the samples from Bangkok and 27% were the samples in rural areas. 5.7% of these children had iron deficiency anemia.

4.1 Prevention and Control of Anemia in Thailand

Anemia is a critical health problem for the world's populations because 30% or over 1,300 million people had anemia, and around 500-600 million people have iron deficiency anemia. The cut-off point of anemia settled by the World Health Organization is the hemoglobin degree <11gm/dl in pre-school children and pregnant women.

Nutrition has been the national concern of Thailand since the mid of 1970, especially the reduction of iron deficiency anemia, as this issue has been integrated into the primary health system and communities. The village volunteers found that the anemia in pregnant women and pre-school children has been decreasing (but not be confirmed by statistical records). The universal iron supplementation is an important strategy in pregnant women by encouraging these women to receive the antenatal service regularly. The school-age children have received the weekly iron supplementation since Year 2000 as well as food fortification, food quality improvement, and other processes required by the Ministry of Public Health. It was found that anemia in pregnant women in Thailand, from Year 1980 to 1990, has decreased according to the 3rd and the 4th National Nutritional Surveys. However, anemia in young children has still been prevalent when using the cut-off criteria placed by WHO for the hemoglobin degree <11 g/dl. Anemia in infants aged 4-6 months hiked to 32-62% from the surveys in 1997-1999.

4.1.1 Preventive and controlling policy on iron deficiency in Thailand

One key strategy of the Ministry of Public Health is to reduce anemia in pregnant women and school-age children under the primary care of the public health system. This strategy was first implemented in 1970 and continued up to 1980. The important mechanisms for such implementation were: village volunteers (OrSorMor.) who were trained for the basic knowledge about health

with a focus on mother and child, good nutrition by supplementing iron to pregnant women receiving the antenatal care at clinics and hospitals, and better transfer system for good care to pregnant women. In this regard, from Year 1990 onward, the pregnant women would have at least one examination in any primary clinic/ Tambon Health Promoting Hospital in the first or second quarter and they would have two examinations in the third quarter. Almost 100% of pregnant women in Thailand have the delivery in the hospitals; they are required to have the obstetrical examination every month until the gestational age is 8 months when they must be examined every 2 weeks and every week when the delivery date is coming.

The pregnant women will receive the 80 mg iron supplement tablets and the multivitamin after each scheduled antenatal service. The anemia prevention in pregnant women is a national policy. However, the obstacle of this matter is that some medical personnel usually think that anemia is not a critical problem. When finding anemia, the physician will dispense the iron supplement tablets for 2-3 months only; it is not the continual treatment. If any pregnant woman misses any appointment, she will not receive any iron supplementation. Besides, some pregnant women misunderstand that if they have the iron supplement, the fetus will be so big. As a result, these mothers do not take the iron supplement continuously (poor compliance). Nevertheless, there has never been any tangible assessment on the policy of iron supplementation to pregnant women.

4.1.2 Preventive and controlling policy on iron deficiency anemia in school-age children

Anemia, especially iron deficiency anemia, is a serious public health problem and it is most frequently found in the world. It affects 2,150 million people around the world, and over 90% of these people are in the developing countries. In the Southeast Asia region, the prevalence of anemia is so high, especially in pregnant women, young children, school-age children, and other women at reproductive age. The studies conducted by the research network in the Southeast Asia region as supported by the World Health Organization placed the strategy of reducing the anemia prevalence to be one-thirds of current prevalence. A meeting was held at the Nutrition Institute, Mahidol University on December 1995 by taking emphasis on anemia in pregnant women and pre-school children.

The personnel of the Ministry of Public Health at the district or Tambon hospital level in collaboration with primary school teachers carry out the anemia screening, but there is a limitation that the district/Tambon hospitals can check the hematocrit only. The children with anemia will be monitored by Tambon Health Promoting Hospital together with the school teachers. However, this process looks like the treatment, not prevention. The Ministry of Public Health settles the surveillance system, but it encounters the aforesaid limitation. The Ministry of Public Health should revise the effectiveness of this system.

The weekly iron supplementation pilot project has been done since Year 2000 in schools participating in the health promotion program in 13 provinces. This project was expanded across the country in 2001 as subsidized by the Ministry of Public Health (data of the Department of Health, Ministry of Public Health). In addition, the Ministry of Public Health has tried, in collaboration with the private sector, to improve the iron fortification by

initiating the triple-fortified instant noodles as Thai people consume a large amount of noodles. This is the cooperation between the Nutrition Institute, Mahidol University and the private sector by producing some noodles supplemented by vitamin A, iodine, and iron. But, the noodle quality has not yet been assessed. Iron and iodine are supplemented in the fish sauce (double fortified). The challenge is to create the knowledge and understanding until the public recognizes the meaning of iron deficiency, which affects any people at every age.

For Thailand, the incidence of anemia in women in reproductive age across the country accounts for 40.7%. According to the study by way of primarily anemia screening in women in reproductive age by public health volunteers at Tambon Janpen, Amphoe Tao Ngoi, Sakhon Nakhon, 76.4% of women in reproductive age were risky to anemia and they had to be transferred; and 30.7% of women in reproductive age were risky to anemia. For women with anemia, 14.2% were Thalassemia carriers. Another 14.2% of women were Thalassemia carriers together with the iron deficiency. 42.8% had the iron deficiency, and 28.5% of these women had anemia by unknown causes.

Iron deficiency during development stages takes huge effect to the growth and functioning of various body organs. It takes the great effect to the growing brain. Several studies indicate that the iron deficiency at the first stage of life affects the newborn babies' intelligence and hearing degree, and this effect continues in the long term. The effect is more severe in premature infants because their brain has not yet been developed perfectly, but the brain growth is so rapid. The American Academy of Pediatrics, and the European Society of Pediatric Gastroenterology and Nutrition advise that the premature infants should receive the iron supplement at least 2 milligrams/kg/day after being discharged from the hospital in order to prevent the iron deficiency anemia.

Regarding the results of iron deficiency to infants' behavior and

development, Oski et al. studied the infants aged 9-12 months with iron deficiency, and they found that those infants had the biochemical alterations, which took effect to their behavior and development. In Thailand, Prof. Dr. Ampaiwan et al. (Ramathibodi Hospital) studied the iron nutrition in Thai infants at the age of 1 year at Well Child Being Clinic, it was found that 1.4% of these infants had the iron deficiency anemia; 6.9% had the decreased transport, and 54.2% had the iron depletion. The risk factor was that the infants were fed by the breast milk without any iron supplement or they did not gain the supplement food sufficiently; for example, they received the solid food for 1 meal/day.[11]

4.1.3 Breakfast skipping

Subject to the information from child development centers in various areas, most children skipped their breakfast, which is the most important meal, because the parents were so hurried that they forgot the importance of this meal, but the child's brain needs some food. Based on such study, it showed that the breakfast skipping affected the children's computation skills, short-term memory, reading ability, problem-solving ability, and physical fitness (fatigue). If a breakfast skipper is an old child, he may eat some donuts or soft drink that causes him to have obesity later.

The nutrition at the first stage of life influences the adulthood. If the fetus and infants during the first 2 years of life encounter the malnourishment, they will be risky to diabetes, high blood pressure, and cardio-vascular diseases as the malnourishment affects the functioning of pancreas and all body organs while they are in the womb. The underweight newborn babies and malnourished children are risky to have such diseases when they grow up.

5. Prevention and Control of Thalassemia

5.1 Significance of the problem

Thalassemia is the single gene blood disorder frequently found in Thailand. The disease severity varies. For the most severe thalassemia, the fetus may die in the womb or within few hours after birth. The patients with intermediate or mild thalassemia may not die, but suffer worse quality of life because they need the medical treatment for the whole life, and must spend a lot of medical expenses not less than Baht 100,000 per person per year. **Thalassemia is a non-communicable disease causing the critical health in Thailand.** The health personnel in all related sectors must be involved to prevent and control this disease.

The World Health Organization (WHO) has been concerned about this disease, and arranged several meetings to have brainstorming from many physicians and scientists around the world. One important meeting was held at Sardinia, Italy in 1989 before printing a book entitled "Guideline for the Control of Hemoglobin Disorders" to be distributed around the world. In Thailand, **the Ministry of Public Health prepared the "Policy Announcement on Thailand's Prevention and Control of Thalassemia and Hemoglobin Disorders" on 9 February 2005, which is deemed the national policy.**

5.2 Incidence in Thailand

1% of Thai populations suffer this disease or totaling 600,000 persons while 40% of populations are the carriers, which involve not less than 20 million persons. In each year, not less than 50,000 new couples are risky to have children with thalassemia, and there are 12,000 newborn babies with thalassemia. The incidences of populations with thalassemia genes or each type of abnormal hemoglobin genes, which are thalassemia carriers, are different in each region of Thailand. In addition, the Thai couples encounter the potential risk to have children with severe thalassemia differently in each region: 15.3% in the northern region, 3.3% in the central region, 2.4% in the northeastern region, and 0.5% in the southern region.

5.3 Prevention and control

The effective thalassemia prevention and control must involve two collective measures:

1. Prevention for new thalassemia patients; and
2. Improvement of medical service provided to thalassemia patients.

5.4 Problems and hindrance

Thailand has carried out the thalassemia prevention and control project longer than 15 years. The significant problems and obstacles are as follows:

1. General people and medical personnel have no good knowledge about thalassemia.
2. Pregnant women receive the antenatal care late.
3. Husbands do not pass the blood checking in case that the pregnant women have the abnormal blood screening results.
4. Fetus risky to the severe thalassemia is not diagnosed.
5. For any pregnant woman whose fetus is risky to ß - thalassemia/Hb E, it is difficult to choose whether the fetus should be diagnosed or not or to stop the pregnancy because there are three types of ß - thalassemia/Hb E: major, intermediate, or minor. For all these 3 types, the severity degree cannot be specified when the fetus is in the womb.
6. Some obstetricians or physicians responsible for some pregnant women do not stop the pregnancy although they are aware that the fetus has the severe disease.

6. Importance of Nutrition in Pregnant Women

The nutrition before, during, and after pregnancy is so important for mothers and children. The nutrition during pregnancy is the crucial factor for the child's future health.

Some factors in nutrients can reduce the childhood morbidity and mortality because the fetus receives nutrients through the food the mother has. The previous studies apparently showed the correlation between nutrition and pregnancy. That is, the pregnant women receiving some food insufficiently longer than 8 weeks caused higher rate of mortality and disorders than those receiving sufficient food. Not only physical disorder, **if a mother has the malnutrition before**

and during pregnancy, it also results to the neurologic disorders and handicaps. Then, her child will have certain diseases caused by the degenerative disorder when that child grows up. Meanwhile, the overweight or obesity of pregnant women impairs their health and infants during and after pregnancy. Consequently, these women must bear high expenses during pregnancy, delivery, and post delivery. The care for fetus and infants of women with malnutrition, especially complications affecting the infants' physical body and intelligence, causes a huge loss to the infants, families, and the whole society.

Malnutrition during pregnancy

The study on nutrition in pregnant women could be done difficultly as it is against the morality. However, subject to past and present reports, the malnutrition in pregnant women, either severe malnutrition or overweight/obesity, causes many bad results to mothers and children, and many consequent diseases.

Severe malnutrition during pregnancy.

The study on this issue could be done difficultly as it violates the morality, and it involves other social, economic, and political factors. However, according to Kyle and Richard (2006), the newborn babies from mothers suffering the malnutrition during the intermediate and late pregnancy periods would be shorter and slimmer than the babies whose mothers had no malnutrition, and they also had the diminished glucose tolerance, reactive airway disease, dyslipidemia, and coronary artery disease in the adulthood. In case of malnutrition during the early pregnancy period, these babies would have obesity during the adulthood, but this problem would emerge in women, not men, which adds possibilities of central nervous system anomalies, schizophrenia, schizophrenia-spectrum personality disorders.

From Year 1994-1995 when the severe malnutrition occurred in Europe for 6 months, it was found that the median infant birth weight decreased approximately 250 grams. However, this birth weight increased when the nutrition returned normal. This means that the infant birth weight was affected by the malnutrition during the late pregnancy. However, the perinatal mortality rate remained unchanged, and the congenital anomalies did not increase significantly. Importantly, the occurrence of toxemia decreased. The underweight pregnant women must gain more weight up to an appropriate level, especially in the second and third quarter. If they do not gain more weight, they may have the preterm birth or the infants are underweight.

Overweight/ obesity during pregnancy.

At present, there are more overweight or obese pregnant women as they do not have food according to the principle of nutrition. In the United States, the obesity was found in 30% of pregnant women, which added risks to mothers and infants. The pregnancy outcome includes the infertility, early abortion, recurrent abortion, neural tube defect and heart defects in infants, gestational hypertension, and preeclampsia, gestational diabetes, sleep apnea, non-alcoholic fatty liver disease, intrauterine fetal death, Caesarean section, puerperal infection, Postpartum Hemorrhage, and deep vein thrombosis. The most important infant outcome is macrosomia (birth weight more than 4,000 grams), which causes the birth trauma, and a long-term drawback or risk to obesity during childhood, adolescence, and adulthood. If the mother's BMI is over 30 kg/m2 in the first quarter of pregnancy, the prevalence of childhood obesity will be at

15.1% at the age of 2 years, at 20.5% at the age of 3 years, and at 24.1% at the age of 4 years. They are more risky to the impaired glucose tolerance and Type 2 diabetes metabolic syndrome during adolescence. These complications are correlated with the maternal obesity at the late pregnancy period. However, the maternal obesity at the early pregnancy period usually deals with the abortion and congenital anomalies on the embryogenesis stage.

7. Folic Acid Supplementation and Prevention of Birth Defects

The study on nutrition most successfully preventing the congenital anomalies and internationally accepted by developed countries all over the world is the periconceptional folic acid supplementation, which is capable of preventing several congenital anomalies, especially the neural tube defects that are severe congenital anomalies and the huge burden of disease. There are 320,000 newborn babies with neural tube defects worldwide. In the countries providing the

folate fortification, the incidences of neural tube defects have been decreased for 46%. It was also reported that the folic acid could prevent the neural tube defects in the first pregnancy, and prevent the recurrent incidences in the next pregnancy. **The World Health Organization advises any women preparing for pregnancy to receive the folic acid for 400 mg every day. A pregnant woman whose child has the neural tube defects must receive the folic acid for 5,000 μgm (WHO, 2007). A woman should receive the folic acid at least 2 months before pregnancy, and she must continuously receive the folic acid in the first 3 months of pregnancy.**

The neural tube defects frequently found is anencephaly, which is found one-thirds, caused by the impaired neurological system development. Two-thirds of neural tube defects are myelomeningocoele that is the condition that the spinal cord and meninges to stick out of the child's back. It was found that 85-90% of spina bifida infants could live longer than 1 year as they have the surgery. About 75% of these infants could grow up to be adults, but they had the deformed legs, urinary tract impairment, and excretory system impairment, as well as hydrocephalus, and intelligence and learning disorders. These are the most severe and prevalent congenital anomalies. The widely accepted concept in reducing the neural tube defects incidences is to reduce the risk of occurrence by way of folic acid supplementation/ fortification.

7.1 Risk to the occurrence of neural tube defects

The risk to neural tube defects will be higher in women whose families or family members used to have neural tube defects, or women having diabetes before pregnancy, or receiving the anticonvulsant especially valproic acid. Other risk factors include the race, shortage of vitamin B12, level of education, and economic status.

7.2 Folate and neural tube defects

Folate is a water-soluble B complex vitamin, and important for the growth and development of fetus. Folate is more needed in pregnant women. It takes an important role in the closure of neural tube during the third week of pregnancy. Before a pregnant woman is aware of her pregnancy, the neural tube will be developed from the neural plate to be the neural tube before growing to be the fetus's nerve and brain system. If a pregnant woman receives the folate insufficiently; it will cause the congenital anomalies of neural tube. In case of cephalad end, the brain forming will not be perfect. In case of caudal end, the fetus will have the spina bifida. These neural tube defects can be prevented by the folic acid/ folate supplementation.

7.3 Folate and non-NTD birth defects

The correlation between folate and neural tube defects has been internationally accepted since 1970. Later, in 1980 and 1990, some studies were conducted to confirm such information. In 1980, Smithells et al. reported that the periconceptional vitamin supplementation could prevent the neural tube defects. In 1999, CDC reported on giving the folic acid in China. It was found that the women receiving the folic acid for 400 μg every day before marriage up the first 3 months of pregnancy as compared with women not receiving any folic acid. The result showed

that the occurrence of neural tube defects was 4.8: 1,000 or a decrease of 1.0:1,000 in the northern part of China, and a decrease of 0.6:1,000 in the southern part of China. Such decreasing ratio may deal with the nutrition and heredity.

The new knowledge during the past 10 years supports that folate could prevent other congenital anomalies such as congenital anomalies of urinary system, congenital heart disease, omphalocoele, cleft lip and cleft palate, and oro-facial clefting. In conclusion, the periconceptional folic acid could prevent most of severe congenital anomalies. It was also reported that the folate deficiency may relate to the chromosome abnormalities. It was predicted that the folate metabolism abnormalities in mothers might cause the Down's Syndrome, and spina bifida in pregnant women. It was hypothetically summarized that the folate metabolism might correlate with the meiosis error.

There are rare studies in Thailand on awareness/knowledge about the importance of folate in preventing congenital anomalies. From the report by Wilaipan Prapaporn et al. from studying pregnant women and medical personnel, they had so little knowledge that folate could prevent several congenital anomalies. The research team distributed the questionnaires to 500 pregnant women and medical personnel working for women at reproductive age at Chulalongkorn Hospital from June to December 2003, the result showed that, among 383 pregnant women who responded the questionnaire, **only 23.5% knew that folate could prevent congenital anomalies while 3.4% of them knew that they should receive folate before pregnancy, and only 0.3% of these women received folate before pregnancy.** Meanwhile, 40% of women at reproductive age who were the medical personnel knew that they should receive folate before pregnancy. This study indicates that the project of educating about folate or folate supplementation (food fortification) is extremely important, and this continues the health problem in Thailand.

Conclusion

In Thailand, the prevalence of congenital anomalies and genetic disorders is the same to other developed countries, but these congenital anomalies give more impact to our health system due to poverty, uneducated condition, and public health, which has not yet been concerned about the prevention of congenital anomalies and genetic disorders, but emphasized on other communicable diseases, e.g. HIV, narcotic problems, and adolescent pregnancy. The genetic advances enable us to understand the sources and prevention of diseases better. The most important genetic knowledge is the benefit from giving folate before pregnancy to avoid congenital anomalies.

In 1992, the Ministry of Public Health of the United States announced that every woman planning for pregnancy had to receive 400 µg of folic acid before pregnancy, and throughout 12 weeks after pregnancy. The Government conducted the campaign to give the intensive knowledge to the public. The result showed that 99.3% of pregnant women receiving the antenatal service at clinics in developed countries gained some information about the importance of folate, and a half of these pregnant women received folate before pregnancy.

But, this policy has never been placed in Thailand.

QUALITY OF THAI PRESCHOOL CHILDREN

Executive Summary

Development of Thai preschool children in the past 15 years

• **No Intelligent Quotient (IQ) test for preschool children, except general development.**
The development of preschool children consists of 4 main parts: 1) fine motor development; 2) gross motor development; 3) language development; and 4) social and self-help development.

• About 30% of Thai preschool children have the **immaturity.** For the past 15 years, Thai children have had the **delayed language development at the high degree, and the degree deems constant (17%).** Other developments, namely gross motor development, fine motor development, and social/self-help development were still normal.
• **Social/ self-help development should be monitored** as it tends to be higher in every survey (double increase).

What does the delayed language development in Thai children signify?

The survey indicating that Thai preschool children have the delayed language development **does not mean that Thai children's IQ is lower.** The surveyed data just tells us that **this group of children is likely to be not smart** because they are short of opportunities in learning from surroundings, less language understanding, and worse communication skills to tell their need; so they have less learning, and they may be less intelligent than their peers later.

Important research/knowledge base relating to the language development in preschool children

• Some research presenting a key factor affecting the language development, that is, **economic status of children's families.** The children from families with low economic status engaged fewer words than those from families with high economic status for 2 times. The main cause is the quantity of talks in the family.

• **Children's language learning starts when they listen to the language spoken at home.** If the family speaking to its child frequently, the child will practice the listening skills and language understanding; so the child's vocabularies will be increasing.

• Many parents have an **incorrect attitude** as they believe that letting the children to watch TV or play the computer will make them more intelligent and speak so early.

• The language use starts from birth up to 3 years of age. **When a child is at the age of 3 years, he/she will possess his specific communication base (speaking style, talkative, reticent).** For example, a child from the family with few talks will be still, not ask many questions, and not be talkative.

• Children **with delayed language development. If this is not healed,** the problem will explode when they are at the primary school level when they have certain learning problems, either reading, writing, and calculation, and this results to **the IQ survey in Thai children finding that Thai children have the low IQ.**

From research to practice: social movements for the promotion of preschool children development

1. Power of family reinforcement with focus on creating positive interactions in the family, and reducing time spent to watch TV/play computer.

2. Attitude adjustment and educating the personnel working for young children with an emphasis on positive interactions between adults and children.

3. Publicize the public to be aware of problems and to recognize the importance of joint problem-solving

• Arouse awareness in the Thai society of Thai preschool children suffering the immaturity and delayed language development at the high proportion and these problems seem constant for the past 15 years.

• Arouse awareness of immature language development that results to children's IQ and their studies in the primary school level in part of reading, writing and calculation.

• Arouse awareness that **"Parents can do"**; the parents can promote their child's development, language, and literacy since the period of infancy.

• Tell techniques and practical methods to be done in the daily life.

• Prioritize the children with high risks or minor children, low economic-status children, children of construction workers. The working must be proactive so that these groups of children have better chance to listen to the language because only the parential power may not be sufficient.

Development of Thai preschool children in the past 15 years

From reviewing the preschool children development reports, it was found that the national-level data was rare. The first report started in 1991-1992 in Thai people's health survey by using the simple child development inventory. The second survey was done in 1996-1997 with the national health examination survey report. Later, in 2001, an integrated research project for Thai children development was conducted. Every survey gave a relevant conclusion that a large number of Thai children had the delayed language development and find motor development (1). In 1999, the Department of Health surveyed Thai children development for 3 consecutive years. The data collection was in form of research by collecting the samples across the country. The Denver 2 Developmental Screening Test was used for more than 1,600 children per survey. Lately, in 2010, the results of 4 child developmental screening tests were not different; about 70% of Thai children had the mature development but the suspected delay development fell into 30% of them (2).

From the survey data on Thai preschool children done by other agencies, namely The Office of Education Council, Ministry of Education (random for 600 persons around the country) (3), Rajanagarindra Institute of Child Development, Department of Mental Health (random for 2,079 persons all over the country) (4), the data was relevant to that surveyed by the Department of Health, that is, Thai preschool children had the considerable delayed language development. The fine motor development should be encouraged while the social/ emotional development and gross motor development were normal.

Table 1:

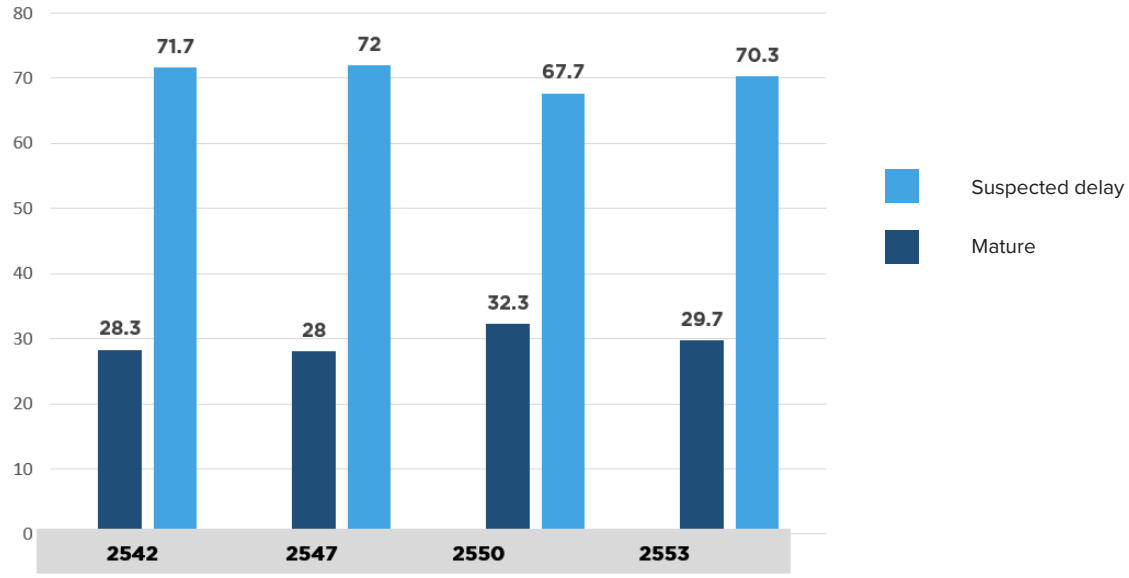
Survey data on the development of Thai preschool children (2, 3, 4)

Agency	Year	Tools	Results	
Department of Health	2010	Denver 2	Suspected delay development: 30%	High proportion of delayed language development
Education Council	2007	Competency of 3-5 Year Children Manual	Language development Fine motor development Observation and interest in surroundings	Should be more promoted.
Rajanagarindra Institute of Child Development, Department of Mental Health	2011	Child Development Inventory, Department of Mental Health	Language use Fine motor development and intelligence	Thai children's normal values are below standard criteria

From surveys for the development of Thai preschool children by several agencies, the results were relevant, that is, Thai preschool children had the delayed development at the high proportion. The developments to be promoted were the language and fine motor development.

Graph 1:

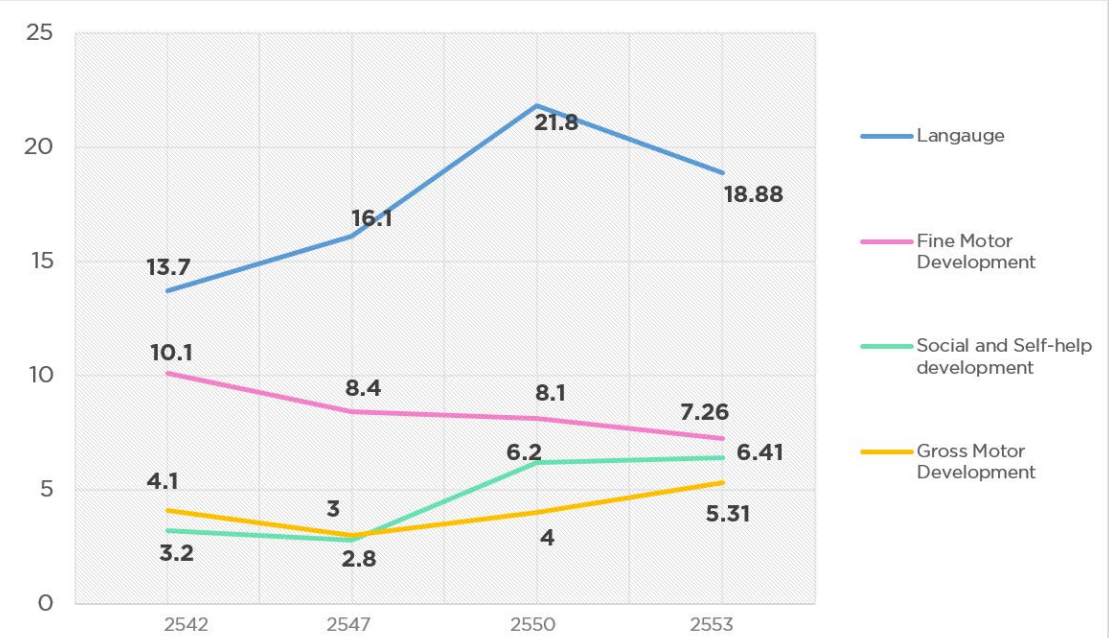
General development: research surveys for Thai children development from 1999-2012



Source: Department of Health, 2012

Graph 2:

Suspected delay development: research surveys for Thai children development from 1999-2012



Source: Department of Health, 2012

Suspected delay development	Tendency for 15 years
Language	**Always high**
Fine motor	Constant
Social/ Self-help	Double increase
Gross motor	Constant

Throughout 15 years, it was found that Thai children had the delayed language development at the high proportion and this proportion has never decreased. However, other developments, namely, gross motor development, fine motor development, social/self-help development were normal. The social/self-help development must be monitored as it tends to be higher in every survey (double increase in 15 years).

Tip:

No Intelligent Quotient (IQ) test for preschool children, except general development. There are 4 major developments: 1) fine motor development; 2) gross motor development; 3) language development; and 4) social and self-help development

What does the delayed language development in Thai children signify?

The survey indicating that Thai preschool children have the delayed language development **does not mean that Thai children's IQ is lower.** The surveyed data just tells us that **this group of children is likely to be not smart** because they are short of opportunities in learning from surroundings, less language understanding, and worse communication skills to tell their need; so they have less learning, and they may be less intelligent than their peers later.

Tips: Language Development in Preschool Children

• An infant begins acquiring the first language in the womb as it can hear its mother's voice in the third quarter.

• A child's language learning starts from listening to the language spoken at home and talked to him. The child practices the listening skill and understands the language. His vocabularies will be gradually increasing. (11)

• Language acquisition starts in the family. **When a child is at the age of 3, he possesses his specific communications** (speaking style, talkative, reticent). For example, a child from the family with few talks will be still, not ask many questions, and not be talkative. (12)

• Reading and writing start at the period of infancy **by daily experience, talks, tales, stories.** Learning of symbols and alphabets emerges before the child can read or write. (13)

Important research in relation to language development **in preschool children**

Zero to Three – National Center for Infants, Toddlers and Families finds that a key factor affecting the language development is **Economic Status**

The research showed that the children from low economic status families held fewer accumulated words than those from high economic status families. This gap has been gradually larger until at the age of 3 when the children from low economic status families had fewer words than those from high economic status families for two times. The main cause was the quantity of talks in families. The families with good economic status would speak to children more than those with low economic status for 2-3 times. (11)

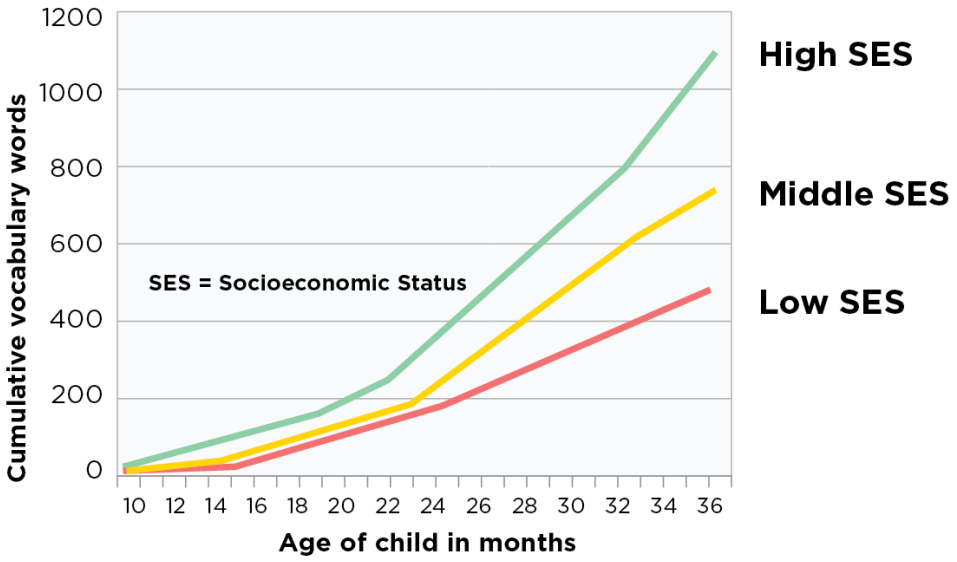
Except economic status, at present, the children and families spent more time for TV and computer. From surveying children aged between 4-16 years, who received the medical services at hospitals belonging to the Royal Army, it was found that these children spent time to watch TV during normal semesters approximately 2-4 hours. **The parents also had the positive attitude toward TV watching; for example, they believed that TV watching made children smarter and speak earlier.** (16)

The different assets from infancy and larger language gap result to the children's life at the primary school level. The children with delayed language development would have slower learning and other learning problems, e.g. reading, writing, and calculation. (9, 10)

In 2011, Zero to Three – National Center for Infants, Toddlers and Families submitted **a policy proposal on language development and learning promotion in children with focus on family interactions,** supporting the learning process of public health staff working with young children, and educating the parents via various media. (14)

Graph 3:

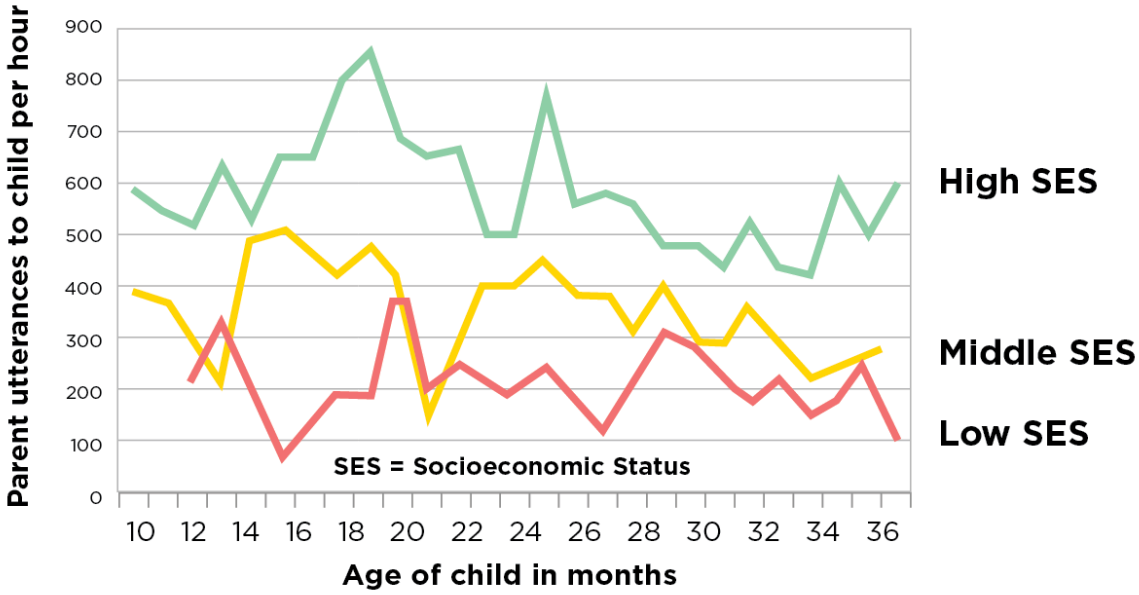
The Gap in Children's Language Ability Begins Early



Source: A Window to the World, Early Language and Literacy Development, Zero to Three, 2011 (14)

Graph 4:

The Frequency of Communication Young Children Experience at Home Differs Greatly

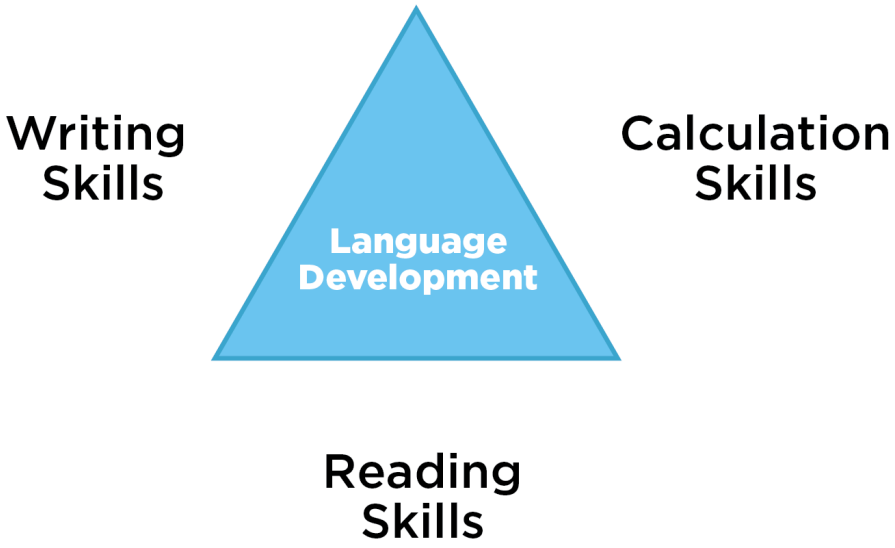


Source: A Window to the World, Early Language and Literacy Development, Zero to Three, 2011 (14)

The research indicates that the basis of language use starts from infancy up to the age of 3 years. The key factor to the different language development in child is the family's economic status; children from families with good economic status and parents' more speaking to children would achieve better language development.

Chart 1:

Relationship between language development in preschool children and studying problems at the primary school level



Source: Impairment of Learning Skills, Nichara Rangdarakarnnon (9)

For preschool children with delayed language development, when they are at school-age, they will have certain learning problems in part of reading, writing and calculation.

If the delayed language development in preschool children is not remedied, this will affect the children during their school age as they will suffer certain learning problems and understanding. This results to the IQ surveys in Thai children as the results showed that Thai children had low IQ.

Screening and promotion of preschool children development:
system and mechanism of public health agencies

The current working problem in Thai children development does not fall into the shortage of new knowledge base, **but the systematic implementation of existing knowledge base. The management system improvement of well-baby clinics** deems the innovative success derives from the university research, which leads to the area work system, resulting to health care and monitoring the development of Thai preschool children with aims that Thai children receive benefits, and quality and single standard services all over the country.

For work problems in Thai children development throughout the past 15 years, apart from the high proportion of immature development in Thai children, another major problem is the shortage of **preschool children development screening tools, which are simple, creditable, and indicate normal values under standard criteria of Thai children.** The construction of **Thai Developmental Skills Inventory (TDSI)** deems a progress of caring for Thai children development as it is able to seek for and screen children with suspected delay development before giving some initial advice.

Development of management system of well-being clinic

The importance of Well-baby Clinic is that it is the first entrance to monitor, screen, and promote the child health and development. For any irregularities in children, the Clinic would provide some initial advice and help. For several tens of years, the Well-baby Clinic has not yet achieved the precise working standard while the care services to preschool children must be more provided and the service quantity the children receive is increasing. As a result, the **complicated problems emerge in every part, either in service provider, service users, and task burden regarding documents and information.**

In 2006-2011, ASEAN Institute for Health Development, the Department of Health, and the Academic Working Team of Saiyairak Hospital Project, collectively conducted the research to improve the service quality system of Well-baby Clinic by setting up the service standard, and improving the management system and personnel quality. The experiment started in some pilot provinces, was monitored and evaluated to find out any problems and hindrance. There were also the knowledge sharing forums, and promotion for the participation by community volunteers. **The Research Project has been continuously improved until it becomes the service quality system of Well-baby Clinic.**

Now, the children receiving services at the Quality Well-baby Clinic are systematically cared for **health, nutritional condition, development screening, and surveillance for any risk factors affecting child development.** This prototype project

Examples of Activity Quality Well-baby Clinic	Principle of Quality Well-baby Clinic Our Target is Children
1. Medical history taking	
2. Physical check-up – general check-up, evaluate the development, weight, height, head circumstance, blood pressure, oral cavity and teeth, sight, and hearing	**Strong →** General check-up Vaccination Examination of teeth Examination of blood, urine Evaluation of nutrition
3. Lab test – hematocrit (to check anaemia), urine test	**Smart →** Examination of anaemia Examination of eyes and ears Development evaluation and promotion Autistic screening
4. Screen in any risky areas – lead and others	
5. Vaccination	**Good →** Emotional Quotient screening Parenthood school
6. Dispense the liquid drug for disease prevention	
7. Give some advice on child rearing, development, safety, and others.	**Happy →** Medical history taking Advance advice
8. Meet the dental personnel	

Source: Sirikul Issaranurak, 2012

is transferred to the quality improvement system of Saiyairak Hospital, and is carried out in the provinces where the service centers are well-prepared.

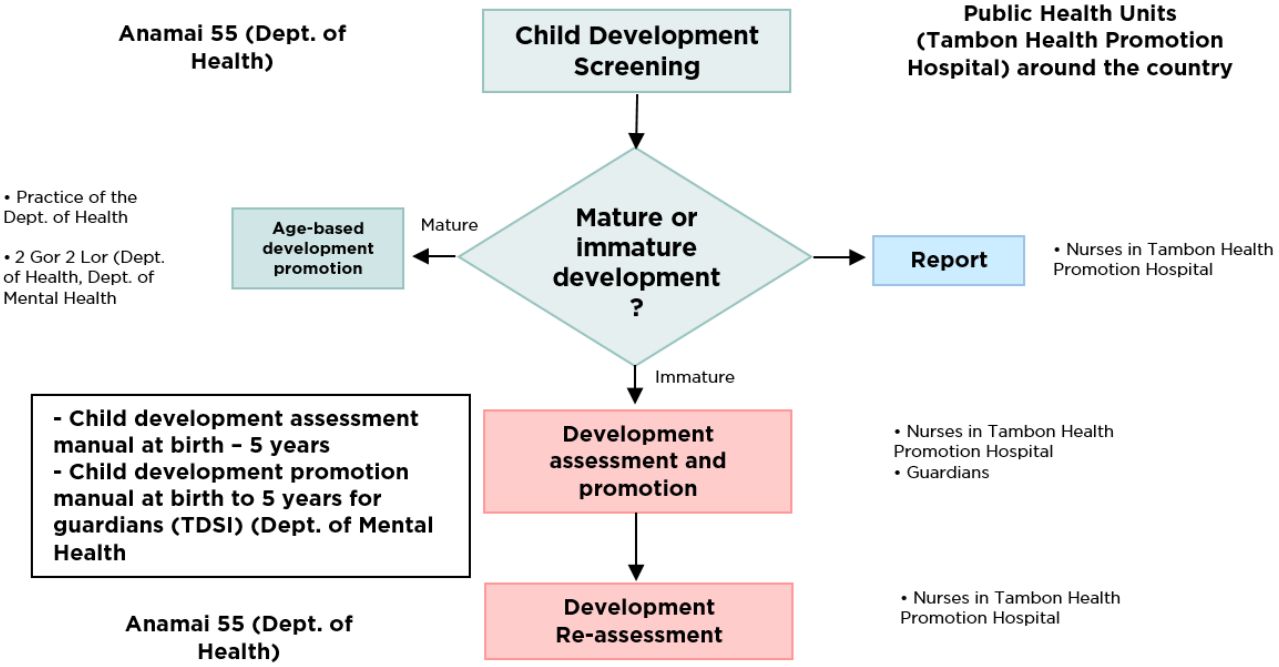
Thai Developmental Skills Inventory (TDSI)

Thai Developmental Skills Inventory (TDSI) has been developed by Rajanagarindra Institute of Children Development, Department of Mental Health, Chiang Mai. It is a screening and development promotion form for children at birth to 5 years of age. It is used to assess 5 aspects of child development: 1) movements; 2) fine motor skills and intelligence; 3) language understanding; 4) use of language; and 5) self-help and social skills.

TDSI was constructed under cooperation of several sectors, either technical or practical sector. The tool contents were adapted from other foreign and Thai child developmental inventories. **The tool quality was tested by calculating the values of validity, reliability, and normal criteria on Thai children development.**

At present, TDSI is widely used by public health service units. The children, assessed by the initial inventory (Anamai 55) and suspected of having immature development, would be further assessed by TDSI. The nurse will inform the parents of the assessment result before giving some advice on promoting their child's development subject to details in the manual accompanied with this Inventory.

Conceptual Framework for Development Promotion Campaign in Celebration of the 80th Birthday of Her Majesty the Queen



Source: Rajanagarindra Institute of Children Development, Chiang Mai

From research to practice: social movements for the promotion of preschool children development

1. Reinforce the power of family

by adding positive interactions, and reducing time the children and families spend to watch TV and play the computer.

- The development of preschool children can be easily and primarily promoted, that is, the parents contribute time to play with their children, speak to and listen to them. This simple method is the technique the new-age parents forget as they take time while staying at home to watch TV or play the computer. It is essential to educate

and change the parents' attitude that playing with and speaking to children are more useful than letting children watch TV or play the computer.

2. Adjust the attitude, and offer the practical knowledge to the personnel working for preschool children

- Management – Appropriate proportion between teachers and children, environmental arrangement to stimulate the learning-by-playing, use of language via various media, e.g. tale, song, role-play.

- Attitude adjustment and education about techniques and methods – Adjust the paradigm so that the teachers and caregivers to children realize the importance of promoting the language development in every child, especially children form low economic status who they may be silent and not talkative. The teachers and caregivers should learn simple techniques and methods to insert the language learning in the daily life. For example, while the infant sleeps or the mother changes the diaper or baths for it, the mother should speak to the child or sing a song to attract its attention to focus on the activity is done.

3. Publicize to arouse the public awareness of problems and importance of collective problem-solving

- Build the Thai society's awareness of the immature development of Thai preschool children and their delayed language development at the high proportion whereas these problems are likely to be constant for the past 15 years.

- Build awareness that the immature

language development affects children's IQ, which consequently causes their learning problems at the primary school level in part of reading, writing, and calculation.

- Build awareness of "Parents can do", that is, the parents could help promote their children's development. The language and literacy could be promoted at the period of infancy.
- Advise techniques and practical methods to be easily done in the daily life.
- Focus on highly risky or minor children, low economic-status children, and children of construction workers. The working team must use a proactive approach so that these groups of children have more opportunities to listen to the language. Using only parental power may not be sufficient.

Examples of expression used to publicize the positive interactions in the family

- Clear TV away, Bring your child back!!
- To have a smart and talented child, play with him every day!!
- Do you play with your child today?
- A good-tempered child is a smart one!!
- Learning of preschool child – PIA – Play, Imitate, Act

Source: Child Development Clinic, National Institute for Child and Family Development

"The immaturity in Thai children may be initially healed by rooting a new value about time spent by children and families for watching TV and playing the computer, and adding positive interactions in the family."

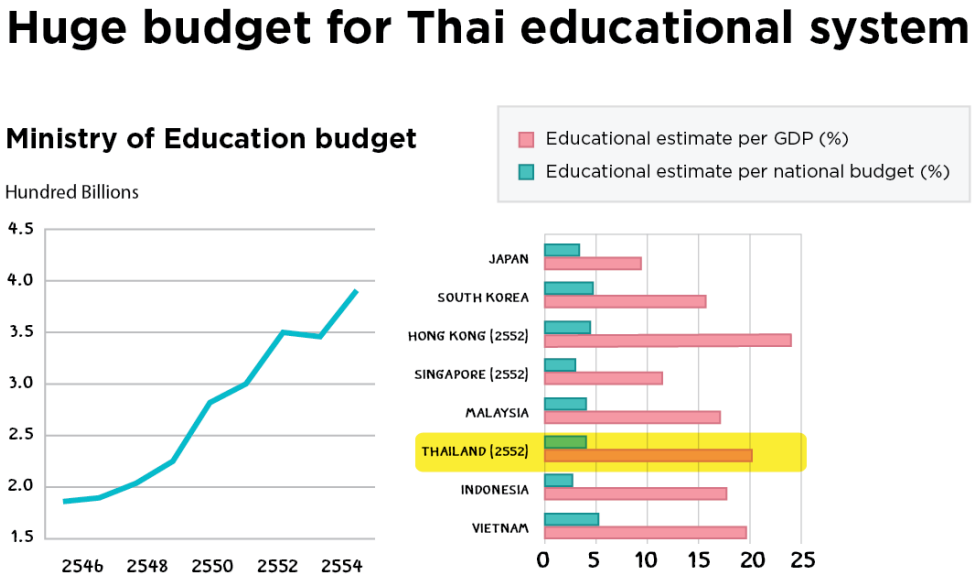

Pentel
oil pastels
16 Colors

DEVELOPMENT OF LEARNING PROCESS: EXIT TO THE DEVELOPMENT OF THAI CHILDREN

From past up to present, Thailand has placed the educational goal at "studying". In fact, "studying" and "learning" have so different meanings because studying is to teach "knowledge"; all knowledge could not be taught as it exists everywhere and every time and a new knowledge emerges every day. Teaching the child to have knowledge, therefore, is an impractical thought. This is different from teaching the child to "learn" that arouses the child to learn new things for his entire life. Unfortunately, Thailand has made the educational investment for studying only. In this regard, a large amount of educational budgets was spent for classrooms, teachers' salary and others. During the past 10 years, the Ministry of Education has been allocated double for budgets. Up to now (the fiscal year of 2009), the proportion between the educational budget and Thailand's Gross Domestic Product (GDP) is 4% or it accounts for 20% of the national budget. When comparing with the countries whose students gain higher academic achievements than Thai students like Japan and Singapore, the educational budget of Thailand is higher than them as illustrated in Figure 1.

Figure 1:

Percentage of educational budget per GDP and per national budget when compared with other Asian countries

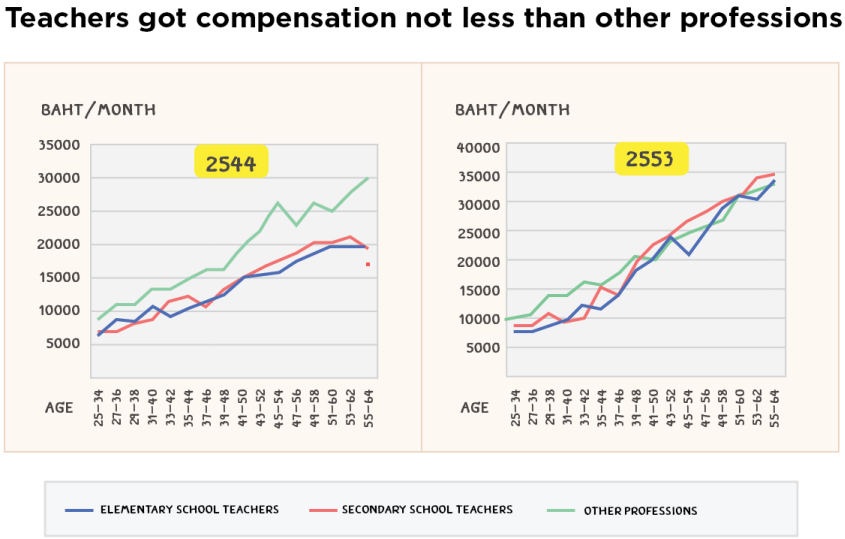


Source: Bureau of Budget (Thailand) and the World Bank as referred in Thailand Development Research Institute

Furthermore, the result from Thailand development strategy research project (TDRI) (http://tdri.or.th/priority-research/educationreform) showed that the monthly income of teachers attaining the bachelor degree and teaching in the government schools in 2001 was approximately Baht 15,000. But, for 10 years later or in 2010, the teachers' average salary was approximately Baht 25,000 or equivalent or higher the average salaries of other professions as illustrated in Figure 2.

Figure 2:

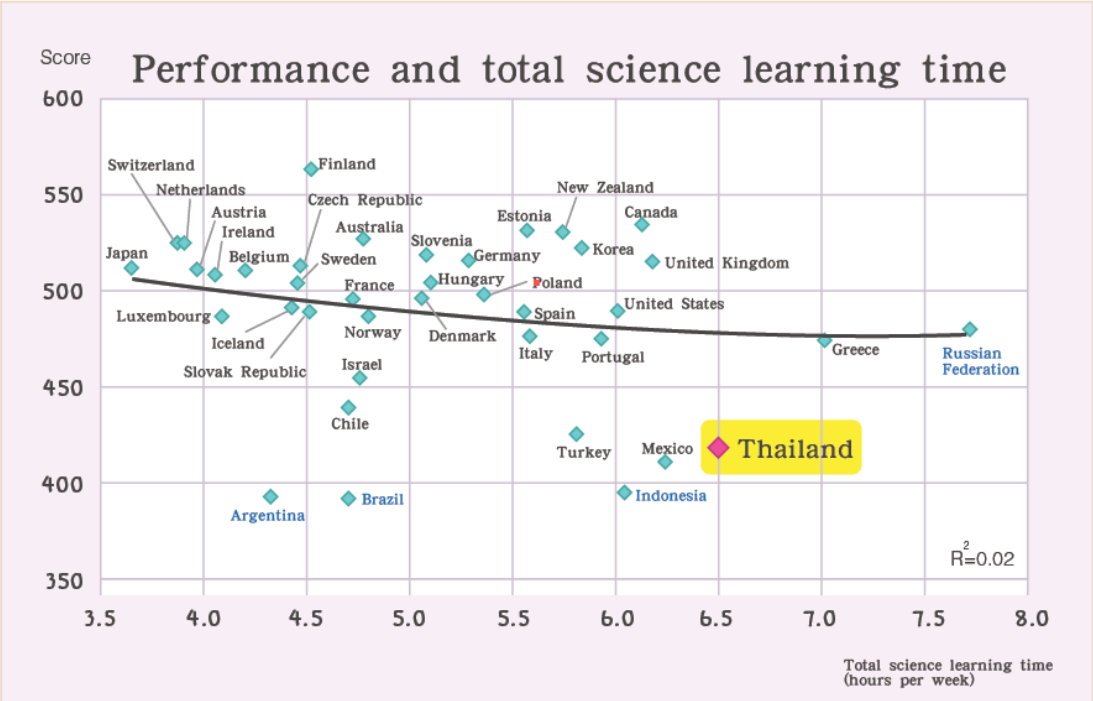
Average salary of teachers at the primary school and secondary school levels, and of other professions in 2001 and 2010



Moreover, the Thai education places importance on classroom hours at school. At present, the Thai education is subjected to the Basic Education Core Curriculum, B.E. 2551, which consists of 8 learning areas. The primary-school students are required to study not more than 1,000 hours a year; not more than 2,000 hours a year for secondary-school students; and not less than 3,600 hours per 3 years of senior secondary school level. This is so much studying time if compared with other developed countries with 700-800 school hours a year on average. If comparing the classroom hours between Thai students and those in OECD countries, and the results from Program for International Standard Assessment (PISA) as illustrated in Figure 3, it was found that Thai students spent 6.5 school hours, but achieved the scores in reading, mathematics, and science around 420 scores; meanwhile, Japanese students spent 3.6 school hours a day, but they got 525 scores on average.

Figure 3: Classroom hours a day and Program for International Standard Assessment (PISA) average scores of Thai students and students in other countries

Students spent much time in studying, but got low academic achievements



Source: OECD (2009) as referred in Thailand Development Research Institute

Huge Investment- No Achievements

The National Test for Grade-3 students (Prathom 3) in 2012 by relying on the Program for International Standard Assessment (PISA) in 3 areas comprising literacy, numeracy, and reasoning ability showed that the Grade-3 students got the average scores less than a half of full scores of each area, that is, 42.94 average scores for literacy; 37.45 average scores for numeracy; and 45.92 average scores for reasoning ability (OBEC presented the NT results for Grade-3 students, Khao Sod Online, 22 March 2013). These results are consistent with the results of Trends in International Mathematics and Science Study, which evaluated the knowledge and comprehension in mathematics and science for Grade-4 and Grade-8 students in 48 countries. For the evaluation results for Grade-8 students (Muttayom 2), Thai students, on average, achieved scores in both subjects lower than the average scores (500 scores) or 441 in mathematics and 471 in science respectively.

Causes of Low Academic Achievements

1. Teacher quality.

Some of Thai teachers have insufficient knowledge. Teaching is not the profession attracting talented persons to study in the Faculty of Education. Although the curriculum, contents and teacher training process have been reformed in order to enhance good-knowledge and teaching-skill teachers while several approaches were used to attract and provoke the good attitude towards teaching such as the Project of Selecting Good Students for Teaching, one-year Teaching Certificate Program after graduate, these measures were not so effective. Meanwhile, some of Thai teachers are criticized for deficiency of ethics and morality, which directly takes effect to the quality of students; for example, teachers' no accountability, teachers' no eagerness for learning and efficient teaching, teaching approach by narration in front of the class, no acquisition of new knowledge, keeping key knowledge or contents or examination for special class, and teachers' attention to show the work performance to upgrade their academic standing and leave students to their fate.

2. Curriculum and teaching and studying.

Teachers spend 70% in each class hour to the teaching and narration so that the students understand the standard contents and indicators designed in the curriculum. As a result, the teachers spend only 30% of class hour to do activities. In the Basic Education Core Curriculum, the students must study 8 learning areas in 1,000-3,600 school hours a year up to the class level. In contrast, most countries set up the school hours at 600-800 hours a year. Definitely, Thai students must study all day, causing their stress, pressure, and unhappiness in studying.

3. Learners.

According to Thai children's intellectual quotient (IQ) and development survey, especially during the early childhood and school-age periods, which are the important basis for human capital development (6-12 years of age), about 28% of these children had the IQ lower than 90. About 40% of this group of children had the IQ at the medium level (range of medium IQ is 90-110). It was also found that about

20% of students in the educational system had different attributes and they needed some special care. These minor students may be divided into 5 groups: 1) learning disorder (LD) students for 10-15%; 2) ADHD children for 8%; 3) children with behavioral and emotional problems for 5%; 4) autistic children, as found 1 in 88 children, for 1.13%; and 5) children with physical disabilities such as deafness, blindness, disabled body as well as intellectual impairment for 2%. These 5 groups of children may have some repeated impairments, but this group accounts for 20%. However, the teachers have little knowledge about the mental health, and have never known how to shift the development of these special children. In the meantime, the educational institutes lack the effective assessment or screening system; so the teaching and learning approach is the same for all. When these special students' development is not promoted appropriately, they study unhappily, which result to low academic achievements, boredom of studying, staying away from school, aggression, getting attention, or drop-out finally.

4. Allocation of educational resources.

The manpower reduction policy since 2000 has resulted to no replacement of retired teachers. Consequently, the school merger takes effect to small-sized schools more than big ones. There is the inequality of budget allocation per number of students. The big-sized schools have capabilities in mobilizing more funds, and are more subsidized than the small-sized schools where contain fewer students and poor parents, and they are unable to mobilize the huge fund for school activities. This deprives the small-sized schools of essential tools and devices for teaching and learning development.

Learning Development: Policy Recommendations for the Development of Thai Education

The academic achievements of Thai students have declined continuously, which is opposite to the double increased educational budget for the past 10 years. This is against the number of subjects and school hours the Thai students must study more than those of others countries. Therefore, the persons relating to Thailand's educational development like politicians, policy-level administrators, scholars, parents, and business owners request for an intensive and inclusive educational reform. For example, Dr. Prawej Wasi (2009: 24) criticized the Thai education at the primary school and secondary school that **"Education, nowadays, is standing on sciences; it is separated from life realities and joint-living. Importantly, the educational reform is to revolutionize the learning concept to be based on life and joint-living instead, and to reduce the memory-based study"**, which gives little and narrow outcome, to be the learning by experience and practice more that could develop the intelligence and skills more widely and universally as they are called the 21st skills. Learning must be based on real practice. This concept is relevant to Boonlert Masaeng (cited in Prawej Wasi, 2009: 24) that the memory-based teaching and learning departs the youth from their local community, and is not done for the strength of local community. The education at the primary and

secondary school levels should strengthen each local community, that is, the school hours should be cut before allowing the students to learn from various community learning sources with a focus on real practice.

The educational management outcome against the increasing educational costs reminds us that our country must change our thought of education. Education must be a “process arousing the children’s eagerness to raise questions, and their curiosity” by supporting the following matters for their life-long learning development process:

1. The 8-learning areas of existing Basic Education Core Curriculum must be revoked and replaced by new learning areas covering important learning issues, comprising language and culture; science, technology, engineering and mathematics or STEM; work life; media skill and communication; and society and humanity. The school hours must be reduced so that the students are allowed to have more outdoor activities significantly.

2. Learning activities are the most important to stir learners’ changes in cognition, affection or psychomotor. Therefore, the teachers must add their learning process through the project base while the democratic process, morality, and ethics are more emphasized. This issue is relevant to the recommendation in the research report on Strategy of Basic Education Reform for Accountability by Thailand Development Research Institute (tdri.or.th on 20 March 2013) that the learning must be reformed by reducing the school hours, and adding various and appropriate learning activities for the 21st skills development such as project-based learning and problem-solving, use of ICT for self-learning, learner development for constructivism, and connectivism-based learning. In addition, the core curriculum should be flexible, and each school may develop the curriculum to be consistent with its particular context.

3. The children’s learning development is mainly based on the teachers who will initiate substantial changes. A teacher must change his role from giving the students some knowledge to arousing them to learn, raise questions, and encourage their natural curiosity through projects and activities instead of narration or teaching.


IRC
RSC

THE FUTURE OF CHILDREN, THE FUTURE OF THAILAND: ANALYSIS OF CIRCUMSTANCES FOR THAI CHILDREN FROM 6-12 YEARS OF AGE

"We are guilty of many errors and many faults, but our worst crime is abandoning the children, neglecting the foundation of life. Many of the things we need can wait. The child cannot. Right now is the time his bones are being formed, his blood is being made and his senses are being developed.
To him we cannot answer "Tomorrow". His name is "Today"."

Gabriela Mistral, 1948

The future of children is the future of nation. Every country all over the world, therefore, places emphasis on the development of child quality that is likely to be decreasing due to lower fertility rate. The report of the Ministry of Interior indicates that, at the end of 2012, Thailand's population from 6-12 years of age totalled 5.6 million, which consisted of 2.88 boys and 2.73 girls; this accounts for 9% of total population in Thailand (Department of Provincial Administration, Ministry of Interior, 2012). Since almost populations of this group are studying at the primary school level, the teachers and school peers, apart from parents or guardians, take great roles in these children's health.

The population at this age experience the great development of physical body, learning talent, and social

interactions. The analysis of problems and opportunities in the quality development for children at this age must cope with the physical health, psychological health, and social development. The Program of Assessment on Technology and Health Policy is supported for the research in order to develop a privilege set for health promotion and disease prevention for young children and adolescents (6-25 years). This Program shall be completed at the end of 2013. This paper is an integral part of such research project. It starts by reviews of Thai children's health by relying on some studies on the burden of diseases, National Health Examination Surveys No. 1-4, and other related local and foreign literature. Such information was analyzed by others with interest in prioritizing and selecting the measures to be nationally supported, which relate to the operating framework of the National Health Security Office and other related agencies.

The results of this research indicate certain health problems for children aged 6-12 years, which include the malnutrition, overnutrition, drowning, violence, sight and visual impairment, learning, and game addiction. The paper provides the analysis of problems, definitions, significance, causes, present coping measures, advice on solutions, and conclusion at the end of this paper.

1. Malnutrition

Facts about Hunger

(Barton, Barrow, Berthiaume, Rewe, & Dey, 2004)

- Every year, hunger and malnutrition kill more people in the world than all AIDs, Malaria and Tuberculosis or more than total dead people in the World War I. It is estimated that almost 10 million people, in each year, are risky to hunger and malnutrition.
- Around 800 million people around the world must go to bed with hunger whereas the world, in fact, can produce the sufficient food to feed all people in the world.
- Nutritional supplement during pregnancy reduces 1 out of 3 babies underweight at birth.

Definition:

In the National Health Examination Survey based on the reference criteria of weight and height of the Nutrition Division, Department of Health, Ministry of Public Health, it stated that the short stature refers to the height less than 2 times of standard deviations of the mean for weight of children at the same age. Underweight refers to the weight less than 2 times of standard deviations below the mean for weight of children at the same age (Vichai Ekplakorn, n.p.). However, both short stature and underweight indicate the chronic malnutrition that may not reflect

the shortage of some nutrients, e.g. iron, iodine, or the acute malnutrition caused by any acute illness, e.g. intestinal obstruction.

Significance of Problem:

According to Thailand's National Health Examination Survey for Thai children aged between 1-14 years, the malnutrition has been greatly dropping if compared with the past. When comparing Thai children's heath between Year 2001 and 2009, Thai girls are taller for 3.6 cm. on average (range: 1.3-5.3 cm.) while Thai boys are taller for 4 cm. on average (range: 2.4-6.1 cm.). From the Health Examination Survey, it was also found that the short stature was correlated with the intelligent quotient; Thai children who were short or quite short, on average, usually had lower intelligent quotient than those with standard or over-standard height at the statistical significance (Ladda Mohsuwan, n.p.). Moreover, the widely accepted empirical evidence indicates that the shortage of iodine and anaemia were correlated with growth and intellectual development and learning (Azizi F. et al., 1995; Sachdev H, Gera T, & P, 2005).

Causes:

According to the 4th National Health Examination Survey in 2008-2009, it indicated that 1 out of 5 Thai children aged between 6-14 years did not get 3 meals a day and the breakfast was the meal most ignored. Less than a half of them had less vegetable and fruit than the quantity advised by the World Health Organization. The malnutrition also involved the economic and social factors. The children in poor families in rural areas experienced more malnutrition than those with good economies or living in urban areas. Besides, the western food consumption culture made Thai children risky to obtain full essential nutrients (Ladda Mohsuwan, n.p.).

Present Coping Measures:

Since 1992, the Thai Government has initiated the School Lunch Program for children aged between 3-12 years (The Primary School Lunch Fund Act, B.E. 2535) and the School Milk Program (The School Lunch Program Office, 2013) for Thai children between 3-9 years of age to enable them to reach some food, and to obtain all essential nutrients. There was also the Program on the System and Mechanism Development for Promoting Optimal Nutrition in Thai Children (Bureau of Nutrition, 2013) as initiated for Thai children aged between 6-17 years; this is a collaboration between the Department of Health, Thai Health Promotion Foundation (ThaiHealth), Nutrition Association of Thailand, Department of Local Administration, Office of the Basic Education Commission (OBEC), and BMA with a main purpose on increasing the potential and competence of LAOs, schools, child care centers, community child care centers, and other networks for the development of desirable nutrition behavior so that the infants, pre-school children, and school-age children had the appropriate nutrition.

Problems and Hindrance:

The deficiency, shortage of budget, dishonesty, and shortage of monitoring the quality for the implementation of school lunch and school milk policies caused Thai children to receive the nutritional food insufficiently. Several schools used the bidding method to get the school lunch and milk at the lowest cost without examining any nutritional quality and value as well as students' need. In addition, unawareness, limited time, and values of the children's

guardians who should focus on the food preparation or control of having snacks in children all resulted to the malnutrition of these children (Jomkwan Yothasamut et al., 2012).

Suggestions:

1. The management system (starting from the budget setting, budget allocation, quality monitoring and control, and impact assessment) of the school lunch and school milk programs in Thailand must be reformed to ensure that Thai children receive the quality school lunch and milk, and to respond to the children's nutrition based on their ages and particular local areas without any dishonesty and corruption at every implementation stage under these policies.

2. There should be other research conducted to closely monitor the nutrition of children at these ages. The efficiency of various solution measures should be evaluated as well. The area-based research should be conducted as much as possible because the nutritional problems usually vary considerably subject to different local communities and cultures.

Top three diseases caused by fatness

and resulting to loss of medical expenses in Thailand are diabetes with loss at Baht 3,400 million, Ischemic heart diseases with loss at Baht 1,100 million, and colon cancer with loss at Baht 340 million. Such diseases also result to the work absence and premature mortality with the loss value at Baht 6,600 million. It is apparent that the obesity not only takes effect to the public health system, it affects production sector in the economic system. Therefore, all sectors, either the governmental sector or private business sector, should have cooperation to remedy the obesity efficiently (Paiboon Pittayathien-anun et al., 2011).

2. Overnutrition

Definition:

Overnutrition may be divided into overweight and obesity. Overweight means that the child's weight is greater than 2 standard deviations, but not more than 3 standard deviations above the mean if compared with the mean weight of children at the same age while the obesity means the child's weight is greater than 2 standard deviations above the mean (Ladda Mohsuwan, n.p.).

Significance of Problem:

According to Thailand's National Health Examination Survey for Thai children aged between 6-14 years, the prevalence of overweight reached 9.7%, higher than the prevalence of 6.4% from the survey in 2001 (Ladda Mohsuwan, n.p.). This may be concluded that the overweight has become a serious problem in Thai children. The overweight also deals with certain major diseases, e.g. heart disease, high blood pressure, diabetes, stokes, and cancer. From studying the economic impact caused by obesity in Thailand, the value totalled Baht 12,000 million or it accounted for 0.13% of Gross Domestic Product (GDP) (Montarat Thavorncharoensup et al., 2011).

Besides, it was found that Thai children's spending for snacks was at Baht 9,800 per person per year whereas their spending for education was at Baht 3,024 per person per year only (Thai Health Promotion Foundation).

Causes:

Obesity is the result of complicated interactions between heredity and environment. Obesity rapidly becomes a severe problem in Thailand and other countries due to the guardians' pleasing children for their consumption of high-calorie food and beverages, consumption of fast food containing high carbohydrate and fat, not eating some vegetable and fruit, and children's behavior in spending most time in studying and watching TV or playing the computer, which caused them to have less exercise, and burn less energy. It was also found that the obesity was more severe in men and in urban areas than rural areas (Ladda Mohsuwan, n.p.).

Present Coping Measures:

Most measures to remedy the obesity have been undertaken in schools under the supervision of the Ministry of Education, and the BMA such as Free of Carbonated Soft Drinks in School Program (including other sweet drinks), Free of Snacks in School Program, "SorPorThor.@ Less Sweet Program, No Sweets for Thai Kids Program (Department of Health, 2013). Many campaigns have been made via media to encourage the parents and guardians to be aware of the obesity. The coping measure is to ask cooperation from various related agencies to willingly carry

out those launched programs.

Problems and Hindrance:

At present, no tangible national policy is placed to tackle the obesity problems seriously because many related sectors in the society have not yet been aware that it gives slight effects at present, but huge impact to the health system and economic system in the future. In addition, solving the obesity problems is quite difficult as it is in line with business benefits in the food and beverage industry, and it is against the Capitalism philosophy. The present undertaking, therefore, is separately done in some schools or communities or the right hand doesn't know what the left hand is doing. Therefore, it is difficult to provoke the national impact.

Suggestions:

1. There should be some research or studies to create the knowledge base to be disseminated to the whole society so that it recognizes the significant problems of obesity at the individual level, e.g. growth, development, quality of life, and potential occurrence of diseases, and at the population and social level, e.g. economic and social loss.

2. The national problem-solving measures should be driven, especially legal and tax measures as they have been done in several countries, e.g. Scandinavian countries where the beverages containing high sugar and fat are highly taxed.

3. The situations and success of measures dispersedly undertaken in communities and local areas should be monitored and evaluated in order to promote and extend such successful measures to other communities and local areas.

Although 15% of Thai children aged between 6-9 years and 45% of Thai children aged between 10-14 years can swim, drowning is one of top causes of death in Thai children despite many of them can swim!! (Vichai Ekplakorn, n.p.).

3. Drowning

Definition:

The World Health Organization defines drowning as "the process of experiencing respiratory impairment from submersion/ immersion in liquid. Drowning outcomes may result to death, body morbidity and no morbidity" (World Health Organization (WHO)).

Significance of Problem:

Every year, about 400-700 children in this group have death from drowning. Besides, the boys have death due to drowning more than girls for 2 times. The children in the north-eastern region are dead from this cause more than those in other regions, followed by children in the central part (including Bangkok, eastern region and western region), northern region, and southern region respectively. If classifying the report on death from drowning by month, April, on average, when is the school summer, and weekends are the time most finding the children being dead from drowning (Suchada Kerdmongkolkarn, Som Ekchalermkiat, Orapin Suplon, Rungjitr Termtor, &

Kanchanee Damnakkaew, 2009).

Causes:

There are 3 factors affecting the drowning of children in this group:

1. Personal factor: Imperfect body, no abilities to survive from drowning, naughty and risky playing. If a child cannot swim, but he/she must travel by boat or do any water activities, wearing the life jacket can save life if the child accidentally falls into the water.

2. Family and caregiver factor: carelessness of parents or caregivers who do not keep watching on children or the caregivers' no skills to rescue the children falling into the water.

3. Environmental factor: Children under 10 years of age usually drown in any water spots around their houses, e.g. water spot at the basement, water course, ditch, and swamp with no fence. For children over 10 years of age, they usually drown in some natural water sources like brook, swamp/ marsh, canal, river, agricultural water source or other public water sources, e.g. swimming pool, etc. (Assoc. Prof. Adisak, Plitpolkarnpim). From the assessment of Thai children's drowning, most of them drowned in the natural water sources near their houses (Suchada Kerdmongkolkarn et al., 2009), which is different from children in other countries that usually drowned in the swimming pool in their houses ("Drowning – United States, 2005-2009," 2012).

Present Coping Measures:

Under the National Child & Youth Development Plan, B.E. 2555-2559, the action plans are explicitly required. It is required that swimming is a basic skill for every student completing the junior secondary level. Nevertheless, the Educational Development Policy and Strategy, B.E. 2555-2558 of the Ministry of Education, and the National Education Plan, as amended (B.E. 2552-2559) do not require that swimming is a basic skill every child should receive. This shows the inconsistency between the Child and Youth Development Plan and other plans prepared by certain related authorities (Ministry of Tourism and Sports; Ministry of Education; Office of Education Council, Ministry of Education). There are also other laws relating to the drowning prevention; namely, Public Health Act, B.E. 2535. According to Chapter 7 of this Act, the Public Health Commission shall provide advice to local authorities for the issuance of local provisions relating to safety; for example, fence or wall built around the swimming pool, at least 1 safety official at a swimming pool with not more than 100 service users, board presenting the first aid for drowning persons, requirement that the child under 10 years of age using the swimming pool must be cared by his personal caregiver, provision of life safety tools, and communication devices to contact other agencies for help. Section 163 of the Navigation in Thai Water Act, B.E. 2456 also prescribes the examination of vessels and each kind of vessels must have the life jackets (life safety kit).

Problems and Hindrance:

It is apparent that the efficient drowning preventive measures should emphasize on the improvement of swimming skill in children and parents for surviving and rescuing any drowning persons. Subject to legal measures, there are only the provisions concerning the drowning prevention at public swimming pools, but no provisions regarding safety at natural water sources, which is the main cause of death from drowning for Thai children. There are neither specific details

about the specifications and quantity of life jackets for children and adults in a vessel. There is also a problem of law enforcement; for example, permanent security at each swimming pool, appropriate provision of life jackets for children.

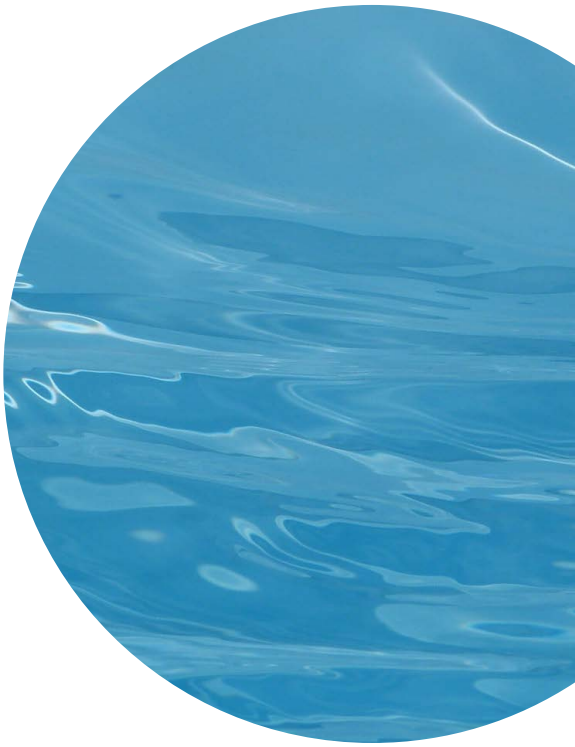
Suggestions:

1. The Swimming for Survival Training Program undertaken by the Department of Communicable Disease Control in collaboration with the BMA (examination) should be expanded across the whole country with focus on skills in long floating in the water, and primary rescue skills for drowning people. This program may start in any highly-risk communities because, according to the semi-experimental research, the children passing the Swimming for Survival Training Program attained the survival skills and rescue skills at the statistical significance (Ref).

2. There should be some more policies and legal measures for safety at natural water sources. Each local administrative organization should be the core responsible agency.

3. Under the Consumer Protection Act, B.E. 2522 (as amended in B.E. 2541) and the Industrial Product Standard Act, B.E. 2511, they require some details about the products causing drowning in children, e.g. bucket, basin or mobile swimming pool, etc. to label them with caution.

4. There should be stricter enforcement of related laws.



4. Violence

We all are actors in scenes presenting violence to children in school. “Our school has no violence” may be the statement of a child who has stayed and been accustomed to violence. (Sakunee Nutpolwat as cited in Thasook Janprasert & Patama Ket-um, 2008)

Definition:

Violence refers to the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation. In this topic, only interpersonal violence will be discussed. The violence frequently found is the family violence and community violence. For the violence against oneself, it will be mentioned in the suicide further discussed in the psychological problems (World Health Organization and International Society for Prevention of Child Abuse and Neglect, 2006).

Significance of Problem:

Since the research and surveys for populations under 15 years regarding violence are sensitive, and they may take bad effects to the sample group, there are no specific reports on violence for children aged between 6-12 years, but some reports cover wider range of ages; for example, the survey of opinions of children and youth under 18 years in Bangkok in 2011, the result showed that 9% of them were maltreated by their family members during the past 30 years, and most maltreated by their own parents (Social Surveillance and Warning Center). Regarding the number of cases in courts, the sex harassment cases for children under 15 years have been increasing rapidly from Year 2002 to Year 2006 or from 6,000 cases to 10,000 cases (United Nations Children’s Fund (UNICEF) Thailand. For the bodily injury, the result showed that about 3.3% of children aged between 6-9 years and 2.8% of those aged between 10-14 years used to be attacked or injured in schools by weapons during the past 12 months. The information from the Child Watch Project also reveals that there were the quarrels or fighting in schools for children aged between 6-9 years and 10-14 years at 20% and 24% respectively. Finally, from the 4th Thailand’s National Health Examination Survey, Year 2008-2009, it was found that the prevalence of children aged between 6-14 years, who were bodily injured and needed the medical treatment at hospitals or clinics was at 0.1% (National Health Examination Survey Office) (other international information sources to compare the level of prevalence). From the nature of this problem, it is believable that the data from the above surveys and reports was greatly below the actual data. If we rely on the above data, it may be concluded that violence is a core problem Thai children encounter now.

Causes:

The origins of violence may be divided into 4 factors:

1. Personal factor, e.g. age, gender and personal characteristics of child caregivers. It is usually found that the child caregivers who are young, male with the background of using the substance or bodily injured are more likely to maltreat the children than other groups of caregiver, or the children

with any physical disorder are more likely to be maltreated than other normal children.

2. Interpersonal relationship factor; for example, a caregiver not receiving the family warmth, having the divorce problem, and getting no support or help from surrounding people are more likely to treat violently than other groups.

3. Community factor; for example, people living in slums, involving in the narcotic trading or having the high level of unemployment are more likely to be maltreated than other groups.

4. Social factor; for example, a society with high economic and social gap, great difference of culture, values and belief or the society containing the media or gaming motivating violence would have higher degree of violence than other societies.

Present Coping Measures:

At present, November of each year is set by the government to be the campaign month to stop violence against children and women. The "White Ribbon" project and "Gentlemen No Violence" project are launched to encourage the society to realize and have the value protesting the violence against children and women. Some projects have been undertaken in many educational institutions under the supervision of the Ministry of Education; namely, "Free Violence School", "Buddhist Path School", etc. The government also sets up One Stop Crisis Center (OSCC) to heal any children, women, aged people, and disabled who are the violence victims, which is cooperation between the state and private agencies. The Reliance Center is established by the Ministry of Public Health to provide services on treatment, remedies

and recovery, and to report all related information for further assessment and operations.

Several laws have been enacted to prevent violence against children; namely, Labor Protection Law, B.E. 2541, Child Protection Act, B.E. 2546, Protection of Domestic Violence Victims Act, B.E. 2550, and National Child and Youth Development Promotion Act, B.E. 2550. These laws require preventing violence against children, which cover the duties of anyone seeing the violence to report such to the competent official. However, there has not been the strict law enforcement by the authorities, and there was no cooperation by community members finding the violence, especially as they had attitude that they should not deal with the violence in the family.

Problems and Hindrance:

Apart from no strict law enforcement and attitude towards no dealing with any other persons or families, the degree of violence has been more likely to be up at all ages. The mass media's attention and improper or wrong news presentation are also the factors causing other people to remember and imitate such violence. The last problem is that Thailand has no efficient and accurate system to take care of and heal violence victims. In some cases, the victims got more mental injuries from the investigation and healing steps or process until they feel scared, conceal, and do not want to enter into the administration of justice and restoration.

Suggestions:

1. Laws should be more enforced by making all senior officials and general officials recognize the importance of stopping violence in the family and community because this problem originates other crimes and violence, extremely harming the national confidence and social and economic stability.

2. More measures should be established to make everyone in the society aware of this issue, and join hands to stop violence and to look after things for the officials, and not to do any maltreatment.

3. There should be a training guideline for the mass media on right methods of working and presenting news relating to violence that may encourage the improper imitations, and stress the victims' injuries.

4. The investigation and proceedings systems against the offenders should be improved to prevent these systems to take any negative impact to the victims, and become prompt and efficient.

5. The restoration system should be improved to become more efficient and not to take any negative impact to the victims. This should include other non-profit organizations that have taken great roles in this issue in the Thai society.

Pik (fictitious name), 7 years, is always hit by his teacher as he fails to follow his teacher's instructions. The teacher concludes that Pik does not pay attention to his study. When Pik does mistakes, the teacher concludes that Pik is stupid. Pik is in the family where the parents have no time to observe his development, or to teach his homework. They just know that their child can have food, sleep, and take care of himself. Although they may know

that Pik has accidents frequently, they just think that Pik is an active boy. Pik has never received the sight checking. When a research project is done, it is found that Pik has the nearsightedness that can be remedied by the eye-glasses. After his class teacher who does the initial screening knows about this fact, she talks sadly that, "I have hit him so long. I think that he's stupid, but, in fact, he cannot see" (Chalanthorn Yothasamut & Apinya Mutdej, 2012).

5. Sight and Visual Impairment

Definition:

The sight and visual impairment obstructs the child's clear sight at a normal distance the general children can do. Medically, the definition is based on the criteria defined by the World Health Organization that if a person fails to see an object in the distance of 20 meters as clearly seen by other persons at the distance of 40 meters, this person has the sight and visual impairment.

Significance of Problem:

According to the survey of 5,461 Thai children studying at Grade 1-6 in 4 provinces around the country, the prevalence of sight impairment was at 6.1%. About 4.1% of total pupils had the severe sight impairment that had to be remedied by eye-glasses. The sight and visual impairment affects children's development and learning resulting to their educational and occupational failure although they have normal or better talent than other normal children. The visually impaired children also have accidents frequently, and have abnormal personalities and behavior, e.g. tilting the neck, squinting eyes when looking at something, or watching TV closely.

Causes:

Most sight impairment in children comes from unknown reasons. Some children have the congenital impairment and they are unaware that their visual ability is not the same to others. According to the studies in Thailand, over 90% of guardians and visually impaired children are not aware of such impairment until they are officially screened in schools.

Present Coping Measures:

There has not yet been the screening measure for every student that are standardized and internationally accepted. Only few visually impaired children as observed by their parents are checked at the eye-glass shops located in the community or medical clinic near their houses. However, almost all of them receiving such service must bear this expense as this matter has never been prescribed as the health or educational benefit. This is different from several countries placing the policy of screening the sight impairment in young children and primary school children by ophthalmologists, paediatricians or school nurses by using the standardized devices. These countries also provide the transfer and treatment system with free of charge.

Problems and Hindrance:

The ophthalmologists and paediatricians in Thailand are not sufficient to screen the sight impairment for all Thai children although Thailand signs the declaration with other nations to collectively screen and remedy the sight

and visual impairment in young children in the Vision 2020 Project (World Health Organization (WHO), 2007). The research results in Thailand also indicated that the primary school students wearing eye-glasses provided by the private eye-glasses shops were inaccurate, and unable to remedy all their visual problems, and they may hammer their visual impairment.

Suggestions:

1. The screening of sight impairment should be held for all children aged between 3-12 years at least once a year by class teachers at the child care centers and schools according to the research results conducted in Thailand and proved that they were efficient. It is expected that this action will be able to screen and take the visually impaired children to receive the medical treatment around 350,000 children, which involves the budget amounting to Baht 200 million a year.

2. The parents should be encouraged to recognize the importance of healing the sight and visual impairment in children because the research result showed that the children would wear the eye-glasses if their guardians encouraged and recognized the importance of eye-glasses.

Mothers of children suffering Attention Deficit Hyperactivity Disorder (ADHD) are absent from work for 17 days per year on average, and their work efficiency drops. This is equivalent to the loss of another 5 working days a year. This also affects the quality of life of these mothers at the statistical significance (Hakkaart-van Roijen et al., 2007).

6. Learning

Definition:

Learning skills disorder (LD) refers to the learning disabilities presented in type of difficulties in reading, writing, spelling, calculation, and mathematical reasoning (Anchira Sethalut & Educational Research Center for Children with Special Needs). Attention Deficit Hyperactivity Disorder (ADHD) is the symptom emerging in young children. The significant disorders include the inattentiveness, restlessness, hyperactivity, impetuosity, and impulsivity (Suwannee Buddhisri, 2005).

Significance of Problem:

Learning disabilities could be found for 4-6% of children aged between

6-12 years (Sirichai Hongsanguansri, 2005), which deter this group of children to have the full learning under the normal educational methods. Learning disabilities may be classified by skill problems: 1) reading disorder; 2) disorder of written expression; and 3) mathematics disorder. The reading and writing skill disorder is more found than the mathematics disorder. Around 40-50% of children with learning skills disorder would have other psychological problems as well, e.g. depression or anxiety.

ADHD is a psychiatric disease most found and diagnosed. It is found in 5-8% of children at the primary school level and more found in boys. According to the international studies, the ADHD children were likely to fall the exam/ be repeatedly in class or complete the education less than normal children. They may have the anti-social personality when growing up. They are likely to use substance, steal or commit crime, and go to prison as they break the law (Suwannee Buddhisri, 2005).

Causes:

It is believed that the learning skills disorder is derived from the brain functioning disorder that interrupts the study and daily activities. The risk factors of this disease rising include the brain injury, complications during pregnancy and delivery, neurological diseases, malnutrition, and heredity.

The causes of ADHD are unknown, but they involve several risk factors. At present, it is found that the ADHD children have some significant disorders or less quantity of important chemicals like dopamine and noradrenalin in the brain than normal children. Heredity is one important factor; it was found that about 30-40% of ADHD children would have

one of their family members suffering this disease or having the same problem. The rearing or environment is only a reinforcing factor making this disorder better or worse. But, for mothers having the malnutrition, drinking the alcohol, smoking, or receiving some toxin (e.g. lead) during pregnancy, it is more likely that their children will have the ADHD (Suwannee Buddhisri, 2005).

Present Coping Measures:

Since the academic year of 2007-2008, the Office of Basic Education Commission (OBEC), the Ministry of Education has performed the screening of ADHD and learning skills disorder by using the screening form for students at Grade 1-6 done by class teachers. Some budgets were allocated to provide the special classes for these ADHD children. Nevertheless, the ADHD and learning skills disorder cannot be solved by such special classes. The Ministry of Public Health and other related health agencies neither have the precise policy to remedy the children with ADHD and learning skills disorder. As a result, most children have not yet been diagnosed and confirmed by class teachers, and treated appropriately.

Problems and Hindrance:

According to an assessment of ADHD and learning skills disorder screening in schools, it was found that the prevalence of ADHD and learning skills disorder as screened by each school in Thailand was so different, starting from the prevalence at 0% to 30%; so it is unbelievable that the screening done by class teachers meets the standard. Additionally, such assessment leads to one importance problem about the coordination between the school screening and the diagnosis by nursing homes under the supervision of the Ministry of Public Health where facing an limitation of the potential of medical personnel. If there is no policy, serious potential boosting, and good cooperation between all related agencies of both minsters, it is useless to carry out the initial screening as this leaves the guilt of life to the children and their guardians when screened and assessed as children as ADHD (Phasuree Saengsuppavanich et al., 2011).

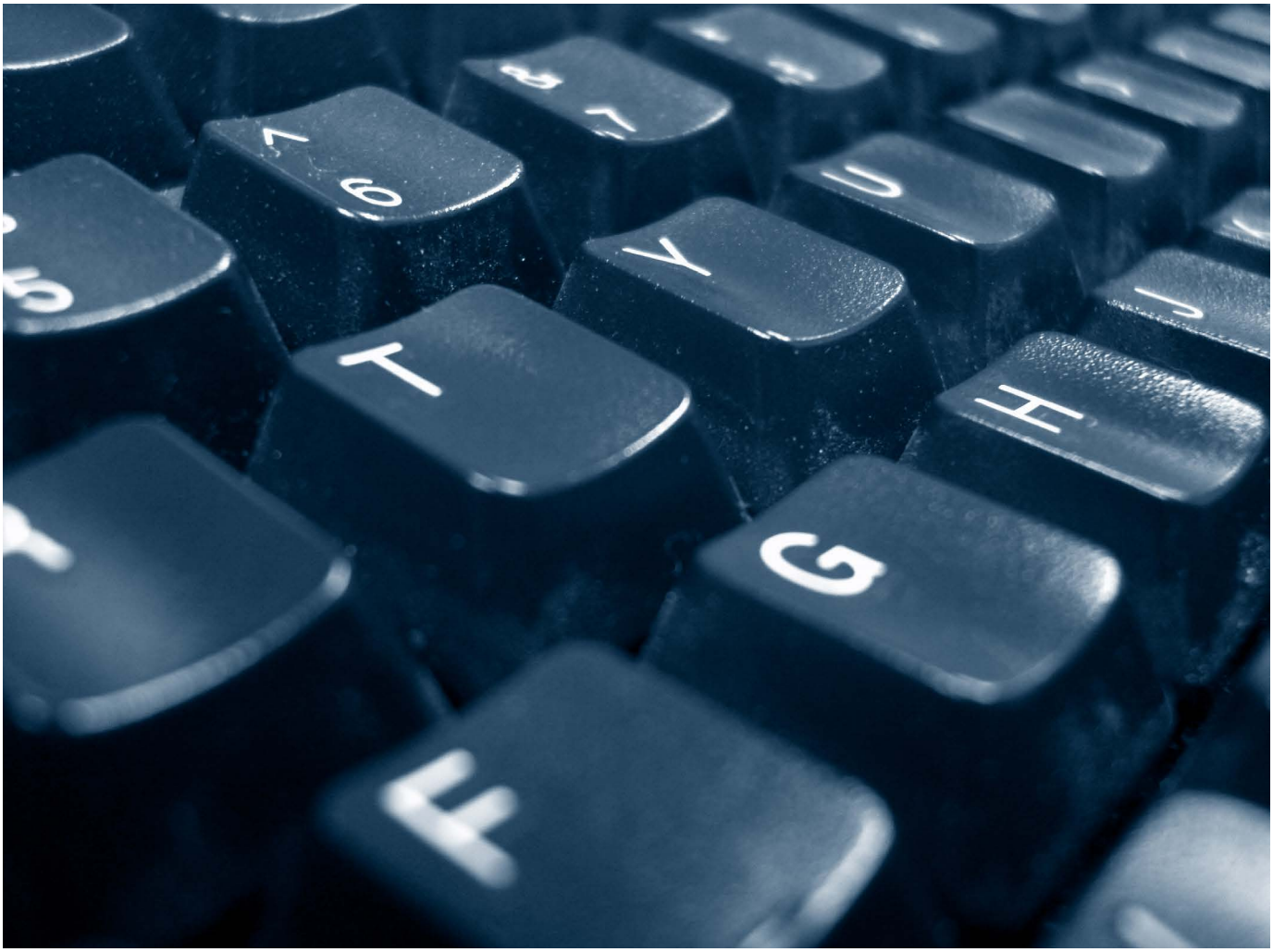
Suggestions:

1. The school screening system should be improved for more efficiency. The screening teachers should be improved to gain good knowledge and experience in using the screening tool, be monitored, and evaluated regularly. There should be the good coordination with the nursing homes that must confirm the screening result and treatment. The medical treatment must be monitored as well.

2. The Royal College of Paediatricians of Thailand should formulate the responsibility framework for the diagnosis, treatment, and monitoring for related paediatricians and specific paediatricians, either policy or practice, and promotes the improvement of related technical knowledge for Thailand.

3. The health security system should involve the possibility and appropriateness of motivating various nursing homes to improve their diagnosis, treatment, and monitoring of ADHD and learning disorder under close coordination with the Ministry of Education at the national, regional, and local levels.

4. The management and general people should be encouraged to recognize the importance and worthiness of screening children with ADHD and learning disorder at the primary school level in order to



receive the good cooperation from the children's guardians in diagnosing, caring, and curing the ADHD.

A mother sends her 12-year old child to the foster home as she is unable to stand on her son's fist, knife edge, and broom handle used to attack her when he wants some money to play games. The 12-year old child says that, "I must box and beat my mom as she usually displeases me, makes me annoyed. When I ask for some money to play games, but she denies, so I must hit her. In the past, I hit her for 6 times only" (Khao Sod Newspaper, 2012).

7. Game and Cyber Addiction

Definition:

Up to now, the game addiction has not yet been officially defined by any national or international organizations. However, from the meeting on "Game Addicted Children and Youth: Solutions" held at the Department of Mental Health, "game addicted child" was defined as a child who plays games without paying attention to his/her studies, with inappropriate time allocation, and too-long playing games. Some children stopped to play games may feel greatly unpleasant,

frustrated, and are aggressive (Ministry of Social Development and Human Security, 2005).

Significance of Problem:

According to the survey by the National Statistical Office in 2012, about 97% of children aged between 6-14 years used the computer/ computer-based internet at least 1-4 days a week. Among these, 21% used the computer/ computer-based internet for 5-7 days a week (National Statistical Office). Besides, from the survey of the Department of Mental Health, the game addiction in children was more likely to be increasing because, from Year 2006-2012, the number of game-addicted children increased for three times or from 4% to 14%. It is estimated that, in every 8 children, one shall be game-addicted (a study examining the preventive factors for game addiction in children and teenagers, 2013). Some empirical evidences insist that the children addicted to violence-hidden games would have the aggressive behavior, quarrels, and use violence against others. Game addiction also impairs the association and human relation, and health such as obesity (Ladda Mohsuwan, n.p.). At present, there are several reports around the world on death caused by playing games for excessive periods of time. Although the number of deaths is so slight if compared with total children playing games, it indicates the problems and tendency of this violent problem in the future (AAP, 2012; BBC, 2005).

Causes:

Game addiction is induced by several factors, which may be divided into 3 following factors (Charnvit Pornnoppadol, n.p.):

1. Social changes. At present, every society is flooded by technologies, but it lacks the activities or places for children to learn for living. Therefore, playing games becomes a pleasant, exciting and entertaining activity.
2. Family rearing. It was found that the children without discipline or family rules, and not living in the warm family were more likely to addict the games as they played games to compensate their family activities.
3. Children's attributes. Some children with psychological disorders are more risky than other normal children, e.g. children with ADHD, learning problems, emotional problems, depression or no social skills or life skills.

Present Coping Measures:

At present, several agencies pay attention and recognize that the game-addicted children would be a national significant problem in the future because the children's game addiction was proposed to the public policy development through the National Health Assembly in 2012. A website (healthygamer.net) was also established to monitor problems, educate, and provide some advice to prevent the children's game-addiction. The "White Game Shop" project, Hot Line Operating Center for Game Shops and Internet, and Center of Game Addict Prevention were established as well. The Council of Ministers also passed the resolution approving the measures of the Ministry of Information Technology and Communication on the on-line game control, which include:

1. limit the on-line game playing by youths under 18 years, who shall be permitted to play games not more than 3 hours a day;

2. prohibit the gambling, competition for the prize or reward or trade for devices in the on-line games;

3. issue the regulations on the

registration of internet shops in order to govern the provision of internet service; and

4. make campaigns to allow the youth and guardians to be aware of drawbacks of playing games for long.

Chapter 2 of the Ministerial Regulation on Permission and Operation of Video Business, B.E. 2552 also prescribes that a video shop shall limit the children's ages and service time; children under fifteen years old shall use the service in such shop from 14.00 hr. to 20.00 hr. only.

Problems and Hindrance:

The existing measures are to control and govern game shops or their business operations, but the business operators have never controlled and cared for this problem seriously. Definitely, the government sector cannot control all game shops as there are over 43,000 game shops at present. In addition, the children may play on-line games at home; thus, these measures could not solve the children's game addiction. The guardians have not focused on the children's game playing as they have no concerns about the drawbacks of game addiction; they expect that the game addiction will disappear when the children grow up, and this should not give any severe problems to the children's future life.

Suggestions:

1. A specific national agency directly responsible for game addiction problems in children and adults should be established like several countries. This agency should perform duties in setting up the definition and criteria of consideration and monitoring, in evaluating the impact, developing the measures and policy, and assessing the success of such policy and measures.

2. A service system for curing the game-addicted people should be developed because the present medical research proves that the psychotherapy and behavior therapy help mitigate the severity of game addiction. Therefore, the game-addiction clinics are established by several countries like South Korea, Netherland, and the People's Republic of China.

3. The research should be conducted to monitor this situation closely, and to build the knowledge base on causes, impact, and problem-solving measures at both individual and national levels. The game addiction is complicated and involves the

social and economic domains; therefore, the research should include various groups of population.

Conclusion

It is apparent that the health problems for children at this range of ages not only include the physical health, e.g. malnutrition, overnutrition, drowning, sight and visual impairment, but involve the problems of psychological health and development disorders, e.g. violence, learning, game addiction. Nevertheless, almost all these problems are resulted by the heredity, rearing by the parents and guardians, care in school, and social environment. Solving these problems is not simple and they cannot be solved efficiently by a single agency or organization. Importantly, there is a gap of knowledge base relating to the violence situation, impact, causes, and efficient solutions due to the difficulties and morale and ethical issues in collecting the data or conducting the research in this group of population who have not yet reached their majority and spend their life at home and school.

Besides, most problems relate to some problems rising in the early childhood (1-5 years). Only solving the problems of children at this age may not be efficient or too late, e.g. irregular nutrition, development and learning disorders, etc. Therefore, the policy makers and others related to the solutions should be concerned about these facts before planning for the integrated solutions. The solutions specified above must be in line with other policies and social measures such as the educational system reform policy requiring that the teachers have less teaching for more time to promote the students' development, and to care them cohesively. Additionally, the economic policy does not allow the marketing mechanism to work independently. It is widely accepted that the food and beverage industry and the information technology put high influence in every society; the individual-level measures may fight against them difficultly. Therefore, the government must take roles in protecting the public from the influence of profit-taking capitalism.

Finally, this article would like to present that despite the awareness at the policy level of solving health problems of these children as well as the issuance of many measures and laws, there are no serious implementations, law enforcement, and monitoring and evaluation; so the

existing problems have not been solved appropriately. The problems of these children are also complicated, depending on social and cultural contexts. The national measures to tackle these problems may not be relevant or unacceptable or inefficient for this group of population. The increasing potential in the formation of knowledge base and the implementation of policies and measures in particular areas and particular groups of population is important as well.

- *The national and community agencies attain the potential in forming the knowledge base, and improving and monitoring measures and policies to solve Thai children's health problems.*

- *Allocate resources for the research and development, and formulate ethical criteria of conducting the research in Thai children to encourage the formation of knowledge base for further analysis and problem-solving for Thai children.*

- *Increase the potential of parents, guardians, and teachers in tackling Thai children's health problems whereas the Government and other community agencies have a duty in encouraging roles of parents, guardians, and teachers.*


adidas

CHILD'S RIGHT AT 6-12 YEARS OF AGE

"Main caregivers of most children attain the primary school level. Nearly a half of school-age children are verbally abused by their parents. One-fourths of children are physically abused. As a result, one-thirds of school-age children have the violence behavior"

Thailand is a country ratifying the United Nations Convention on the Rights of the Child with an intent that **every child has not yet physically and psychologically mature; so each child needs special protection and care,** as well as legal appropriate protection before and after his birth on a belief that the family is a social basic unit and natural environment for growth and well-being of every family member, especially the child. The family, therefore, has a main duty in rearing every child until he can help himself.

The Convention on the Rights of the Child covers 6 general principle and child rights as follows:

1. General principle and treatment of the child
2. Civil rights of children
3. Rights of vulnerable children
4. Rights to body, life and freedom
5. Rights of children against law
6. Rights to developments

All 6 principle and child rights cover the necessities and needs every child must be cared and protected by the State, especially in Item 4 regarding the rights to body, life, and freedom because a child has not yet engaged physical and psychological competency in protecting himself; so he needs care and protection from his parents or guardians. The rights to body, life and freedom in child rights are explicitly required as follows:

- A child must be protected from abuse and unlawful care (neglect or negligent treatment) altogether while in the care of parent(s). (Article 19)
- A child must be protected from all forms of sexual exploitation and sexual abuse. (Article 34)

Similarly, Section 53 of the Constitution of the Kingdom of Thailand, B.E. 2540 (1997) prescribes the child protection to be in compliance with the Convention on the Rights of the Child that, "Children, youth and family members shall have the right to be protected by the State against violence and unfair treatment." The Child Protection Act also prescribes this matter in Section 23 that, "The guardian shall raise, cultivate, and develop a child under guardianship in reasonable manner with regards to local custom and culture. The guardian shall also provide welfare protection to a child under guardianship from being in physically or mentally harmful circumstances."

How does the family care for?

Why are more children abused in each year?

The information about child rights violation is so limited. In fact, it is widely known that there are so many abused children, but the data collection is nearly impossible. The outsiders will know those abuse cases when they are so severe that they cannot be concealed any more.

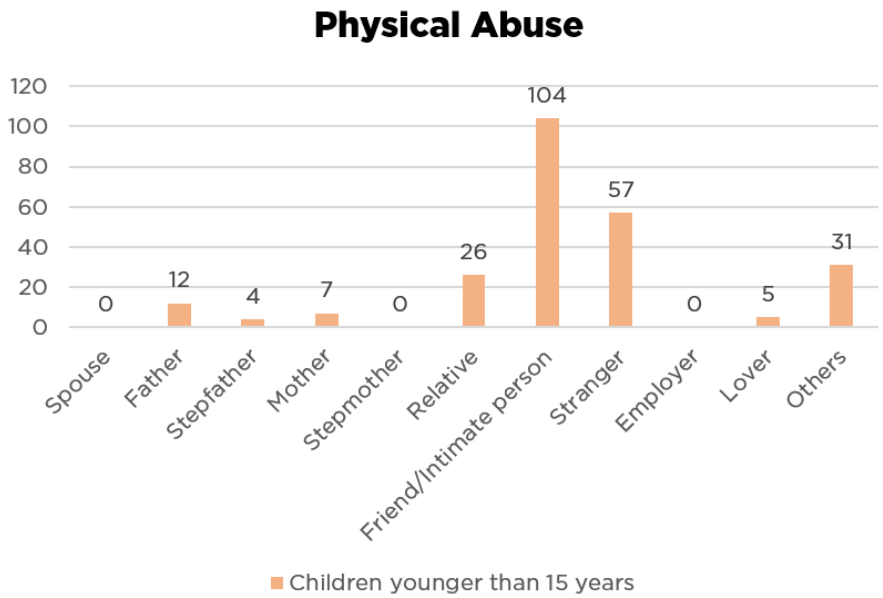
Table 1:

Children whose rights were violated, but rescued by the Center for the Protection of Children, Year 1992 – 2003

Category	Number of rescued children (person/year)											
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Sexual abuse	64	58	74	83	70	94	75	120	95	71	113	100
Child prostitution	237	218	49	29	23	16	15	-	14	44	17	-
Others	-	-	-	-	-	-	-	-	-	-	-	113
Total	301	276	123	112	93	110	90	120	109	115	130	213

Source: Center for the Protection of Children

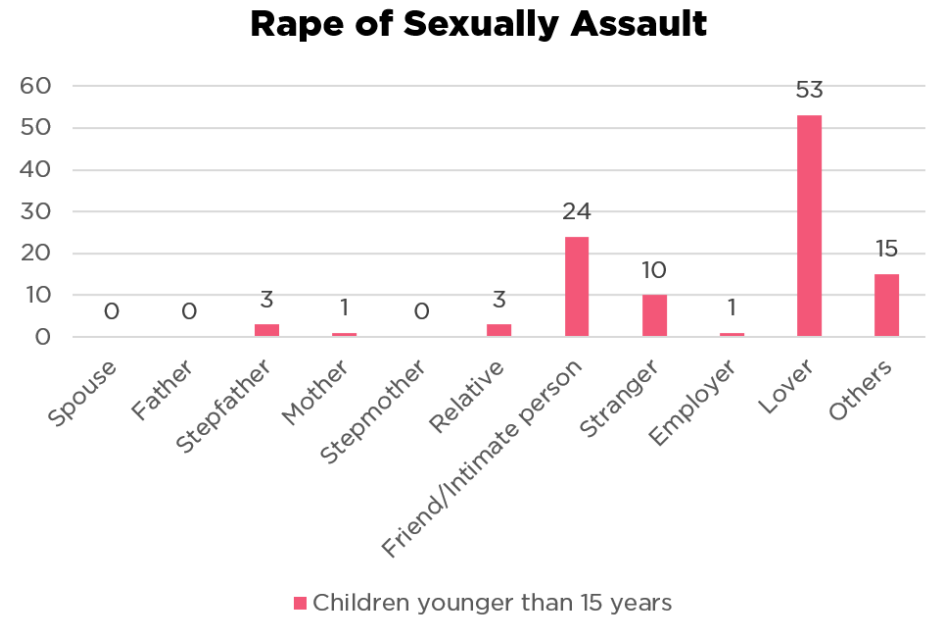
The data in Table 1 above showed that, among violence against children, the sexual abuse is the violence against children that has been rising every year; from 64 persons in 1992 to nearly 100 persons in 2003. However, the number of child prostitutes has considerably decreased due to laws on the suppression of prostitution and human trafficking that have been complied with seriously, and they require severe punishments for offenders.



Graph 1:

Statistics of patients at the Center for the Protection of Children and Women's Rights, Medical Service Department, October 2010 – September 2011 – Category: physical abuse

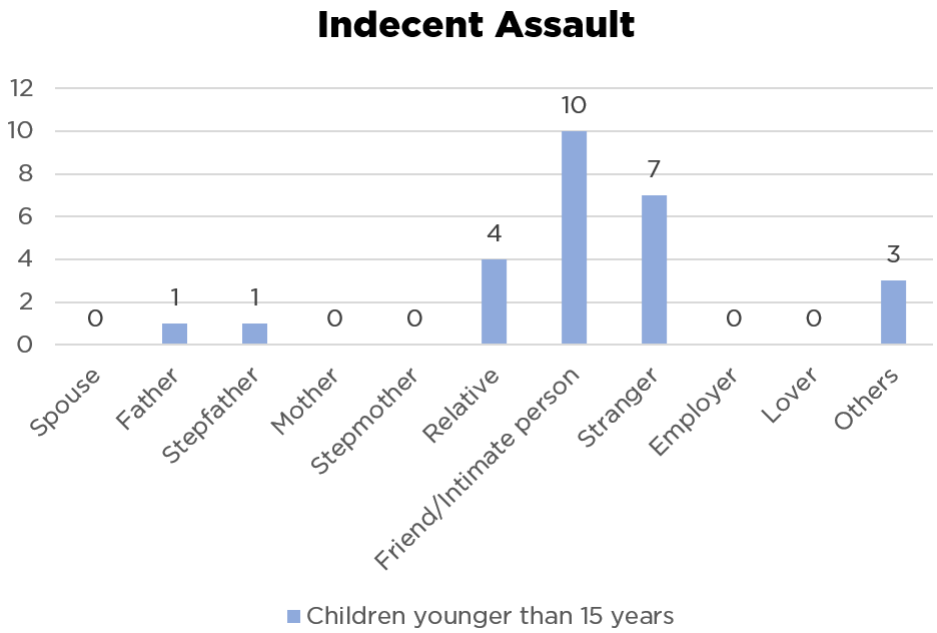
Source: Medical Service Department, Bangkok



Graph 2:

Statistics of patients at the Center for the Protection of Children and Women's Rights, Medical Service Department, October 2010 – September 2011 – Category: rape and sexually assault

Source: Medical Service Department, Bangkok



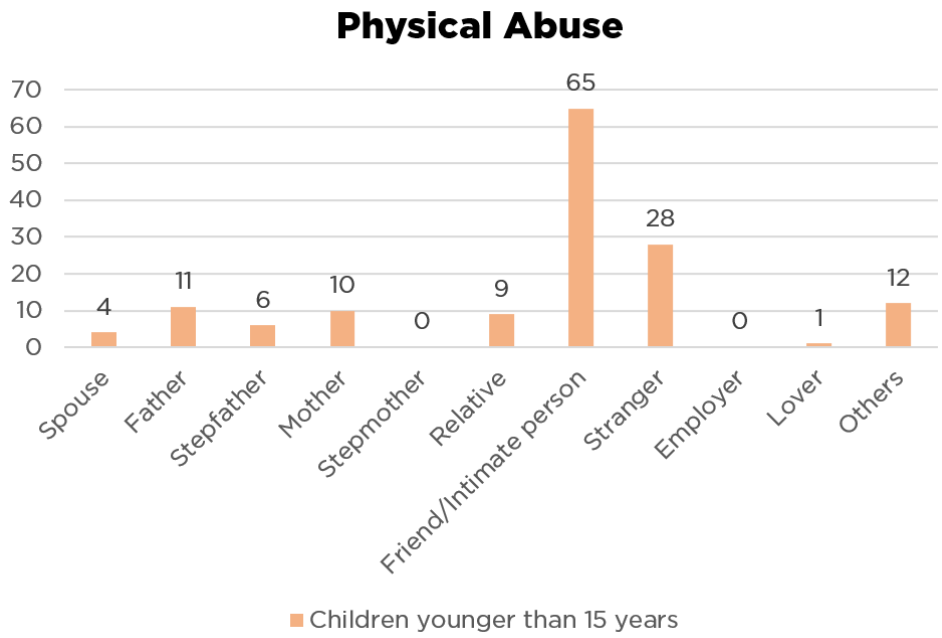
Graph 3:

Statistics of patients at the Center for the Protection of Children and Women's Rights, Medical Service Department, October 2010 – September 2011 – Category: indecent assault

Source: Medical Service Department, Bangkok

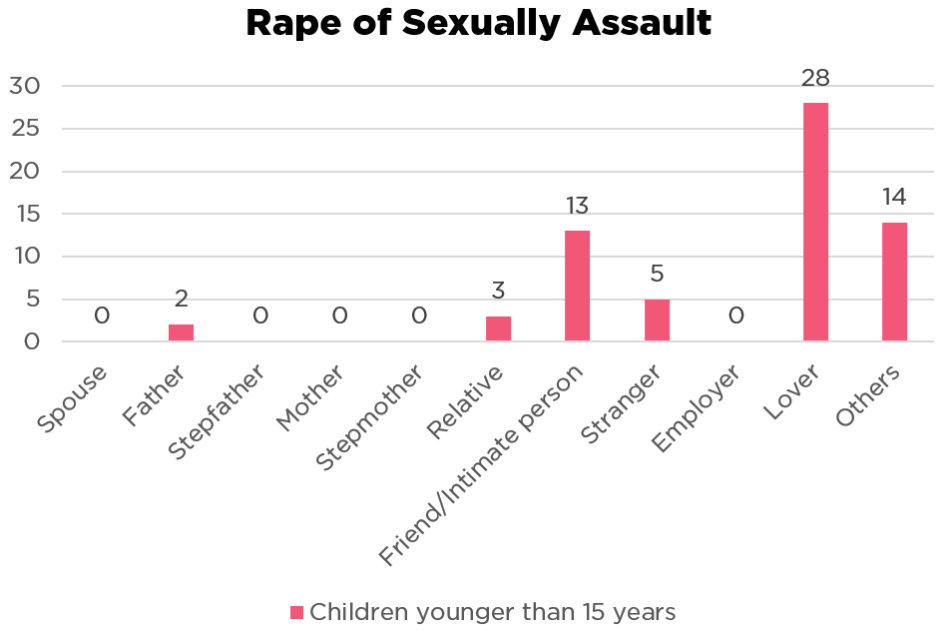
The data in Graph 1-3 includes abuse cases against children younger than 15 years, comprising physical abuse, rape, sexually assault, and indecent assault. It is apparent that the children's danger relating to abuse comes from their intimate persons, starting from parents, step-parents, relatives and familiar persons. It was found that the number of children abused by strangers was less than that of children abused by family members and familiar persons. For example, in Graph 1 presenting the physical abuse, 151 children were abused by their family members and intimate persons while only 95 children were abused by strangers, employees or others.

The next round data is identical. Graph 4-6 indicate the data in the past year. It is apparent that most of children younger than 15 years were physically abused by their parents, step-parents, relatives, peers, and familiar persons like cases of rape and sexually assault. It is obvious in the data on indecent assault that the children were abused by fathers and step-fathers as well as friends and familiar persons. The number of these abuse cases is close to the abuse cases by strangers. All data indicates that the family and home are not the safe places for many children.



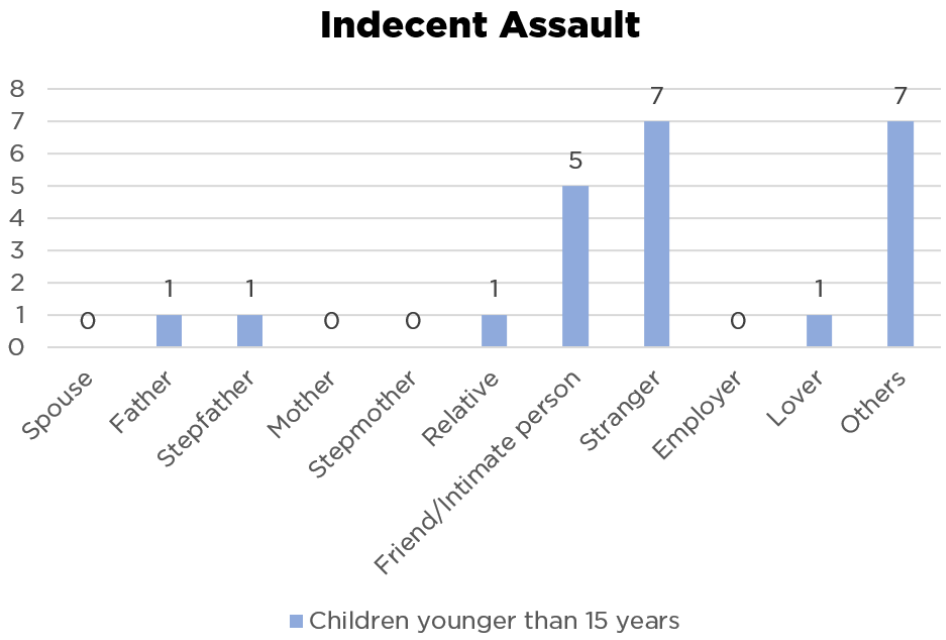
Graph 4: Statistics of patients at the Center for the Protection of Children and Women's Rights, Medical Service Department, October 2011 – September 2012 – Category: physical abuse

Source: Medical Service Department, Bangkok



Graph 5: Statistics of patients at the Center for the Protection of Children and Women's Rights, Medical Service Department, October 2011 – September 2012 – Category: rape or sexually assault

Source: Medical Service Department, Bangkok



Graph 6: Statistics of patients at the Center for the Protection of Children and Women's Rights, Medical Service Department, October 2011 – September 2012 – Category: indecent assault

Source: Medical Service Department, Bangkok

When home is not a safe place for a child!

When the home and members at home as well as intimate persons are unsafe for children, the consequent question is how we place measures to protect the child rights in this matter. Are those measures successful? What are the variables of such success or failure? It may be said that the essence of this matter is the **legal proceedings** to protect the fundamental rights or rights to body, life, and freedom as detailed in Section 1(4), Section 5(1) (2) and Section 6 of the Criminal Procedure Code of Thailand, which emphasize on guardianship by the **parents.** This concept is consistent with the natural circumstance and actual relation between parents and child **under an assumption that the parents shall perform duties as it should be, not the case that the parents ignore to perform their duties or exercise their rights to violate the child's rights to his body, life, and freedom.**

The power of parents to act on behalf of the child who is committed by an offence, under this Criminal Procedure Code, is an absolute power pursuant to the provisions set forth therein, especially in Section 5(1) and Section 3. Section 5(1) requires that the parents as the legal representative (therefore, the father must be the lawful father only) of a minor child shall have the power to act on behalf of the child who is violated without the

minor child's prior opinion or consent. The parents to the child shall have the power to take any acts immediately as if they are the injured person pursuant to Section 3 of the Criminal Procedure Code as follows:

"Persons specified in Section 4, 5 and 6 have the power to act on behalf of the injured person according to the conditions provided in those Sections as follows:

1. To lodge a complaint;
2. To institute the criminal prosecution or join with the Public Prosecutor in the criminal prosecution;
3. To enter a civil claim in connection with an offence;
4. To withdraw a criminal charge or civil claim in connection with an offence;
5. To compound a compoundable offence."

Such authorization to the parents permits them to play roles of guardianship for their child completely. However, although Thai laws provide many securities for Thai children, they tie almost all securities with the parents. In addition, the custom, which does not correspond to the circumstances, must be used as criteria of interpreting the written law. This results to certain limitations for the child rights as listed below:

1. The written law drafted by influence of custom is in Section 1562 of the Civil and Commercial Code in the Chapter regarding Rights and Duties of Parents and Child. The child rights are limited under a provision that:

"No person can enter an action, either civil or criminal, against his ascendants, unless the case is taken up by the Public Prosecutor upon application of such person or a close relative of such person"

This Section absolutely prohibits any child to take a legal action against his parents unless the case is conducted by the Public Prosecutor. It is prohibited to appoint a lawyer to proceed with the case. However, the child himself or the relative and child may proceed as mentioned above in a criminal case only or the case that the parents violate the rights to body, life, and freedom of the child.

Nevertheless, the law permits the child to lodge a complaint with the Public Prosecutor when the child has the maturity such as seniority and education allowing him to have sufficient consciousness for his expression of intent. This proceeding is impossible for a young child or infant.

Normally, when committing a criminal offence, an offender shall evade, but leaving some traces or evidence of such offence. The inquiry official can enter to take action once the victim lodges the complaint. So, the evidence is usually complete enough to enter an action in court. **But, in case of family crime**, the complaint has never occurred or hardly occurred. The offender may be sometimes charged by neighbors, teachers, or relatives to the child, but no one dares to show up. For example, in case the Center for the Protection of Children helped some children abused by their parents, the Center found that most information came from teachers, witnesses, or physicians close to and observing some irregularities of those children; so they reported such to the police. But, in these cases, when the children had to testify to the police or inquiry official, they did not give truth, especially when they confronted the offenders who was their parent(s). In case that the child's statement may cause his

parents to be criminally punished, he would not testify anymore.

2. Except some defects in legal contents under custom influence, there is also a problem of law enforcement by authorities in law enforcement process. That is, if considering the fact, the child's case needs the absolutely different inquiry process from the adult's case. In contrast, the inquiry official takes role and conducts the proceedings of the court like other adult injured persons. But, as the child's condition is so different from the adult, the fact or evidence given by the child would be different from the adult as well. For instance, the sexually abused child may not understand or be aware of the material damage he encounters. The memory and ability in sequencing the event he/she is abused may change pursuant to age or rearing method. Moreover, the problem may be more complicated in case of children with intellectual disorder or disabilities, etc. When seeking for facts in the court relies on the normal method, especially the inquiry by the inquiry official under the Public Prosecutor's control and normal cross-examination of the attorney for the defendant, the techniques and expertise of each person may distort the facts due to the injured person's immaturity. The above event may be seen in several sexual abuse cases against children aged between 4-6 years to which the Center for the Protection of Children gave some help. For one of those cases, a child with intellectual disorder was abused by her neighbor; she could not testify how, where, and how many she was abused. She could not remember the date and time or sequence the event. Finally, the Court dismissed the case because the attorney for the defendant got a hint that the injured person had the intellectual disorder. The attorney asked some questions to lure the injured person until she was unable to make the statement to the Court. In addition, the Court did not see the noticeable damage on the child's body because the child was examined so long after the sexual abuse. In some cases, the child could not state what problem his/her sexual organ had. This is a worrying problem that the laws can protect child rights less than it should be. The defect at the proceeding procedure that the maturity of injured person is not considered; so the laws can offer less protection to children, especially minor children due to physical, psychological, and intellectual disabilities.

What can we do?

The information from in-depth interviews of child specialists gives a relevant picture that the child rights shall be protected by 2 main mechanisms: 1) social intervention for child rights protection; and 2) formation of public awareness that the child is the responsibility of every adult. The legal mechanism is one measure only. When the violence emerges at home, it cannot be observed easily. The application of laws deems solving the symptom not the root cause, and, in some cases, the application of laws could not tackle this problem.

"If a society has awareness of child value; violation against children hardly occurs."

Sapphasit Khumpraphant, 2010

Sapphasit Khumpraphant, Secretary of the Children Rights Center and Honorable Advisor to the Committee on Youth, Women and Elderly Affairs, gave a precise picture of the social intervention when there were some tendencies possibly leading to the violation of child rights.

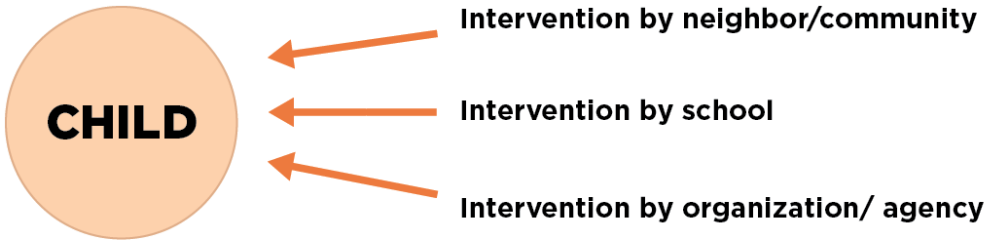
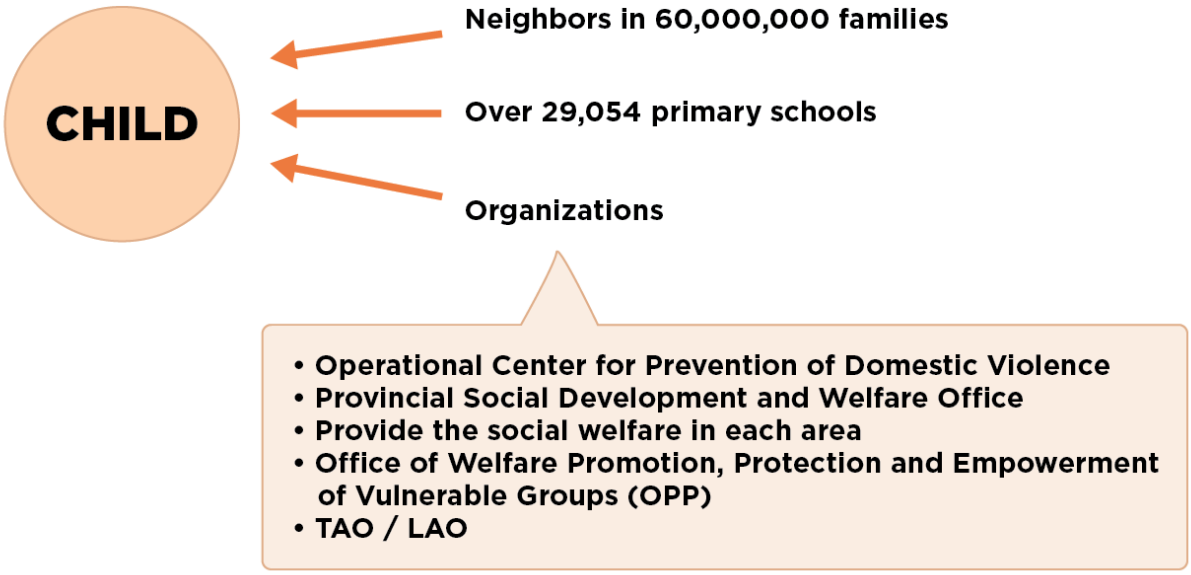


Figure 1:
Persons playing an intervention role for child rights protection

In the intervention process by these three sectors, including neighbor/community, school and organization, the intervention by neighbor is the most efficient because the neighbors and community because they can observe the violation of child rights before others who are not the family members because, generally, the neighbors would notice any wrongdoing in the children before teachers, school, or other related organizations. The intervention by looking after things and pointing out the trace would lead to the close watching for children, and mitigate the degree of violence against them.



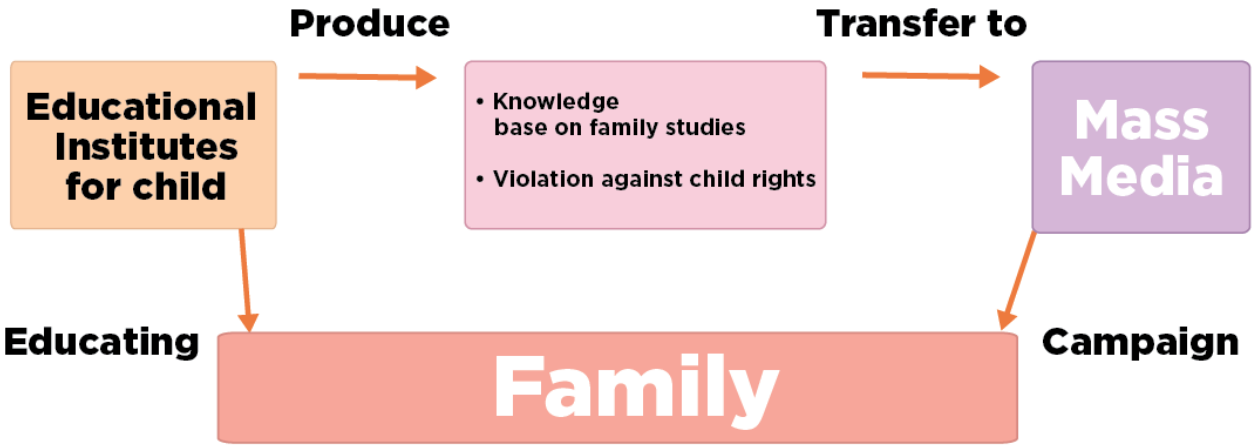
Apart from the house location close to an abused child, which is an important factor allowing the neighbors to notice the violence against the child before other persons, it is certain that, with neighbors in 60,000,000 families around the country, if every neighbor understands that the violence against the child is an attentive issue and a duty of every citizen, the violence against the child will be controlled and dominated by the society. This is the top wish of every society that every area is free from violence against every child.

The next question: *How will we create a society not ignoring the violence against children?*

From our round-table talk about this issue with some persons working for children, everyone agreed that "having the custom specifically valuing the child" is the best security for child rights because how good laws the country issues, if the public has no awareness that the "protection of child rights is a duty of every person", the violence against the child exists forever.

Child Rights Protection: Do it now, don't wait for the policy

Sometimes, the personnel working for children have a question that what policies could wipe out the violence against children. We must accept that Thai people "are stuck" in this thinking system. Whatever matter, we must wait for the policy or the government's help. The conclusion from the round-table talk between the staff working for child rights gave a precise picture that the child protection from violence **can be done promptly without waiting for any policy** by the following concrete process:



In the developed countries, educating the public about the violation against child rights is a duty to be performed regularly and intensively by all mass media governed by the government or private companies until the issue of child rights is widely known and recognized by the public. The mass media, including radio, television, and journal are powerful to "post news" consistently until the child rights issue becomes a new norm of the society.

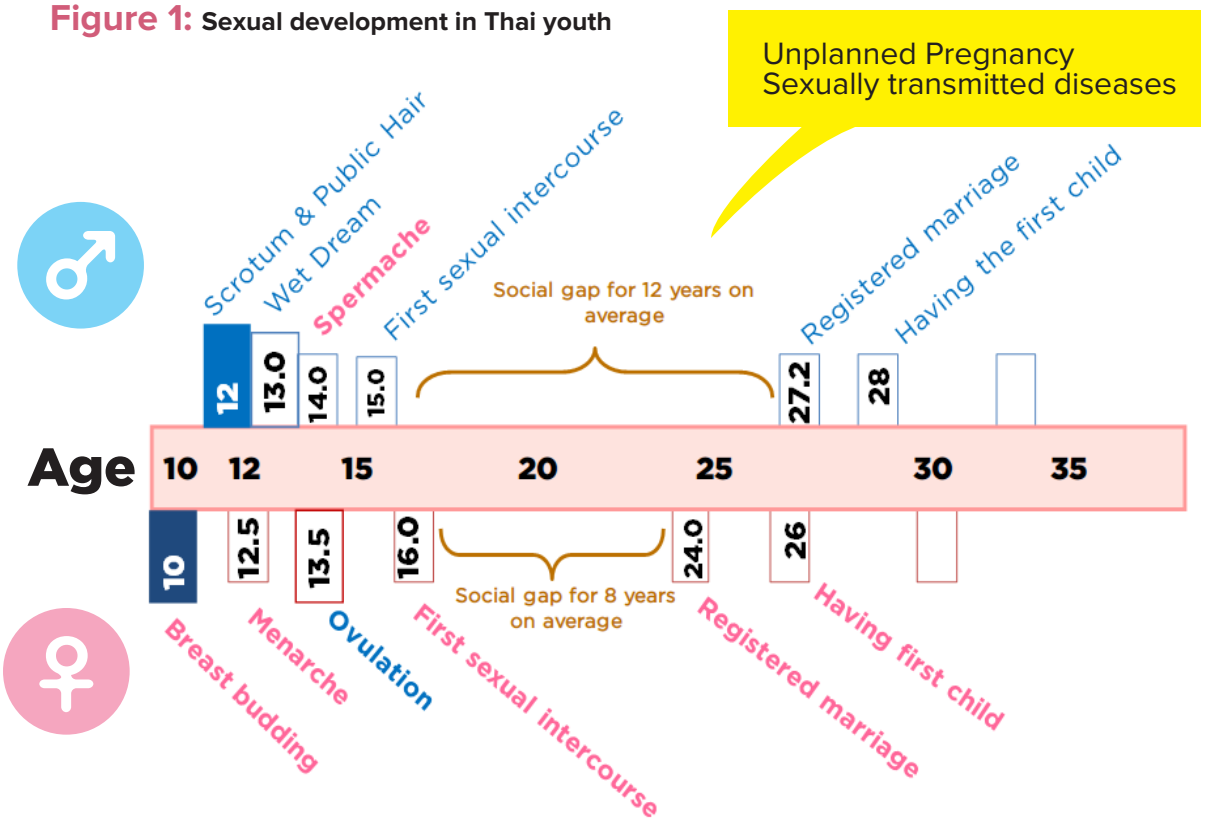
In the meantime, the educational institutes with a duty of building the knowledge base related to the child and "family studies" must build this knowledge base continuously and seriously because the knowledge base on family studies enables the public to have the right thought of the issue nearest to them, that is, "family" because this knowledge base is beneficial for paving the right relationship between parents and child, child-rearing, time allocation, economic benefits in the family, and safety and child rights. When this knowledge base is built up and transferred to the mass media, which "succeeds" the duty of disseminating the news consistently and seriously, the ideal society we all hope will occur soon.

ADOLESCENT PREGNANCY

Sexual Development of Thai Youth

For the sexual development of male and female adolescents (Figure 1), girls begin puberty at the age of 10 years. The major landmarks of puberty for females are breast and onset of menstruation at the age of 12.5 years, but the ovulation does not occur in the first year. Therefore, on average, girls at the age of 13 can be pregnant. Males begin puberty earlier at the age of 12 years when they have the nocturnal ejaculation, and start the first ejaculation at the age of 14. The average age of first sexual intercourse is at the age of 15 years old for males and at 16 for females provokes higher chance of adolescent pregnancy whereas the traditional and official marriages have been delayed; as a result, more unacceptable and irresponsible sexual intercourses have emerged. The gap period between the average first sexual intercourse and marriage leads to several risk incidences such as sexually transmitted diseases and pregnancy without the cognitive development and mindfulness.

Figure 1: **Sexual development in Thai youth**



Source: Suriyadeo Tripathi, Adolescents and Sexual Intercourse, Academic Paper, Thai Health Promotion Fund, 2007

Adolescent pregnancy problems

According to the data collected in 192 countries from the demographic health survey and UNICEF, there were adolescents aged between 10-24 years totaling 1.8 billion persons with the rate of mortality at 2.6 million persons per year. The highest rate of mortality is in the Southeast Asia Region at 35%, followed by Africa at 28% (the percentage of these two zones totals 63% or nearly 2/3 of the rate of mortality all over the world).

Source: Global Burden of Disease Study in Young People, 2004 (Lancet, 2009: 374: 881-92)

Figure 2: **Rate of delivery in 1,000 mothers aged between 15-19 years around the world**

Sub-Saharan Africa

19	Central African Rep.	134
20	Congo	136
21	Nigeria	138
22	Cameroon	140
23	Madagascar	142
23	Senegal	142
	Regional Average	143
25	Gambia	153
26	Burkina Faso	157
27	Malawi	159
28	Ethiopia	168

East/South Asia and Picific

1	Japan	4
1	Korea, Rep.	4
3	China	5
3	Korea, Dem.	5
5	Singapore	8
6	Cambodia	15
7	Sri Lanka	20
8	Austria	22
9	Papua New Guinea	24
10	Malaysia	26
11	Myanmar	31
12	New Zealand	32
13	Vietnam	33
14	Mongolia	39
15	Philippines	40
16	Lao Rep.	50
Regional average		56
17	Indonesia	58
18	Thailand	70
19	Bhutan	84
20	Nepal	89
20	Pakistan	89
22	India	109
23	Bangladesh	115

Americas

1	Canada	24
2	Chile	49
3	Trinidad/Tobago	51
4	Haiti	53
5	Peru	57
6	United States	60
6	Uruguay	60
8	Argentina	64
9	Cuba	65
Regional average		68
10	Mexico	69
11	Brazil	71

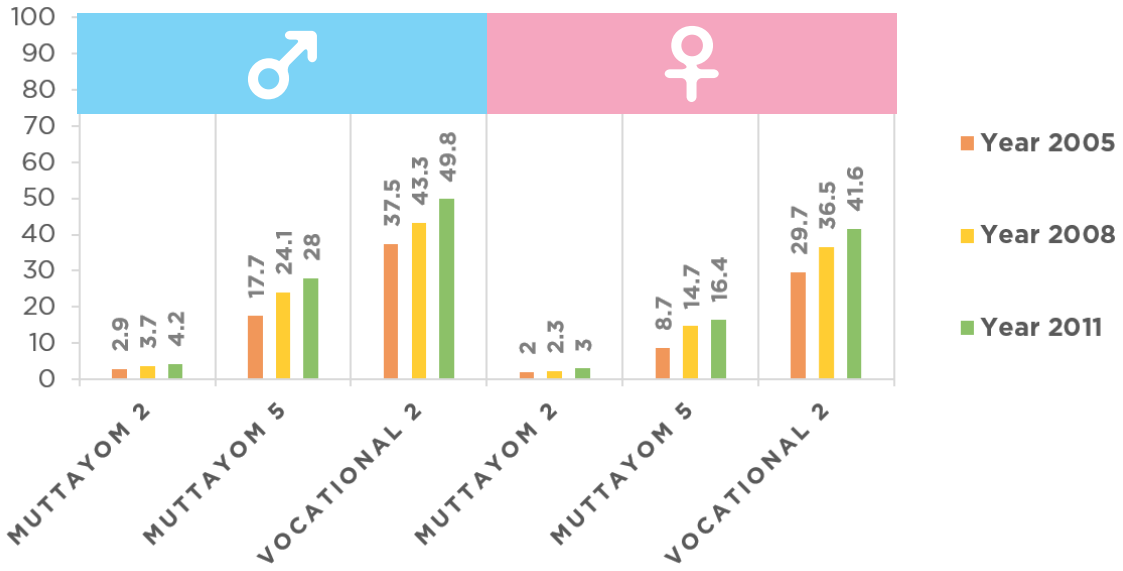
Europe

1	Switzerland	4
2	Netherlands	7
3	France	8
3	Italy	8
5	Belgium	9
5	Denmark	9
7	Spain	10
7	Sweden	10
9	Finland	11
10	Germany	13
11	Ireland	14
12	Norway	16
13	Greece	18
14	Austria	21
15	Lithuania	22
15	Portugal	22
17	Belarus	24
18	Poland	25
Regional average		25
19	Estonia	27
19	Slovenia	27

Figure 2 shows the delivery rate of adolescents aged between 15-19 years around the world in 2009 when compared with another 1,000 women at the same age. The global average rate is 65:1,000. Thailand's average rate is 70:1,000, which is the highest among ASEAN countries. The lowest rate, according to the report, falls into Japan, Switzerland, and Korea. For the United States, the average rate is at 60:1,000 only.

For Thailand, the report on the behavior watching relating to HIV infection in students in Thailand, Year 2011 regarding sexual intercourse and use of condom in the first sexual intercourse (Graph 1, 2 and 3) provides key information as follows:

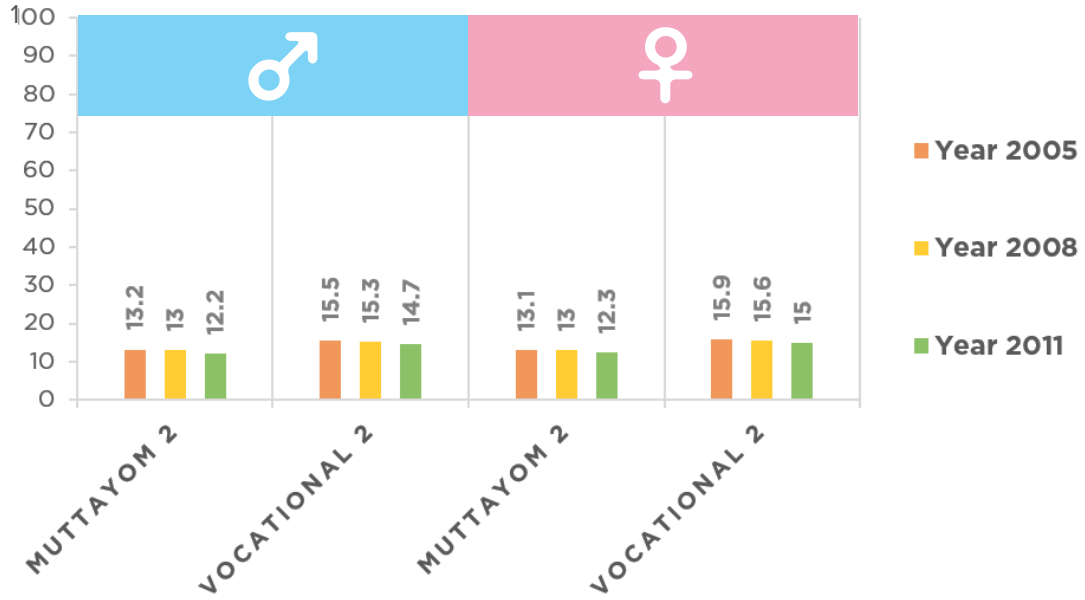
Graph 1: **Sexual intercourse rate of students studying at Muttayom 2, Muttayom 5 and 2nd-year vocational students in Year 2005, 2008 and 2011**



Source: Bureau of Epidemiology, Department of Diseases Control, Ministry of Public Health, 2011

Graph 1 shows the rate of sexual intercourse of students at Muttayom 2 and 2nd-year vocational students in Year 2005, 2008 and 2011. It shows that the rate of sexual intercourse of these students in 2005, 2008 and 2011 has been sharply increasing. When considering the rate of sexual intercourse in these three educational levels, it is apparent that the higher education they attained, the quicker rate of sexual intercourse increased, either in males or females.

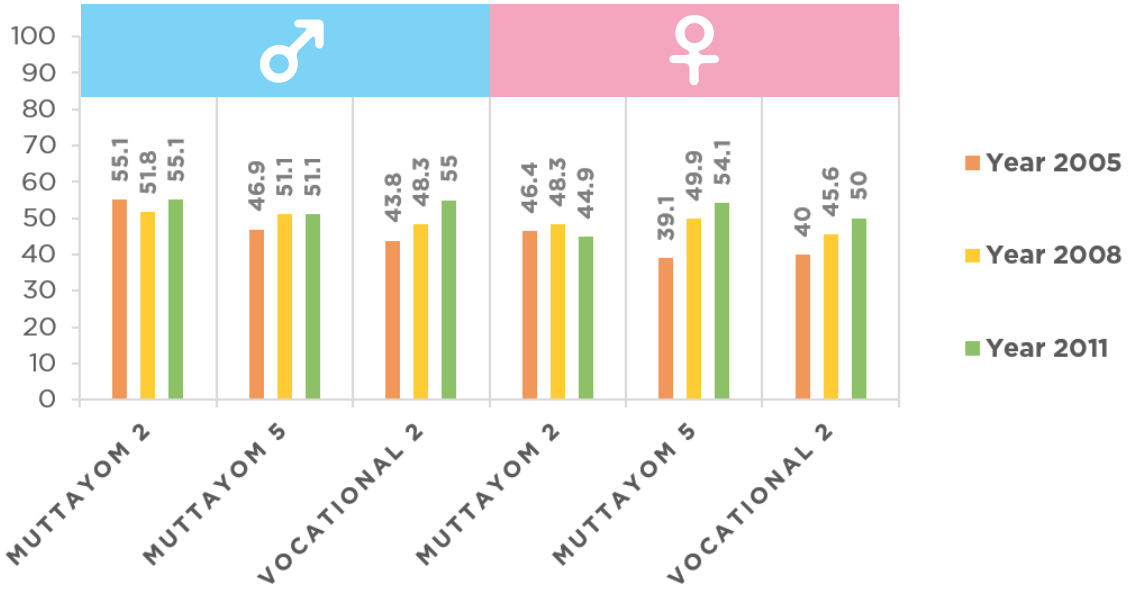
Graph 2: **Average age of experiencing the first sexual intercourse (year) of students studying at Muttayom 2 and 2nd-year vocational students in Year 2005, 2008 and 2011**



Source: Bureau of Epidemiology, Department of Diseases Control, Ministry of Public Health, 2011

Graph 2 shows the average age of experiencing the first sexual intercourse of students studying at Muttayom 2 and 2nd-year vocational students in Year 2005, 2008, and 2011, it is apparent that the average age of experiencing the first sexual intercourse of students has been gradually lower, either in males or females.

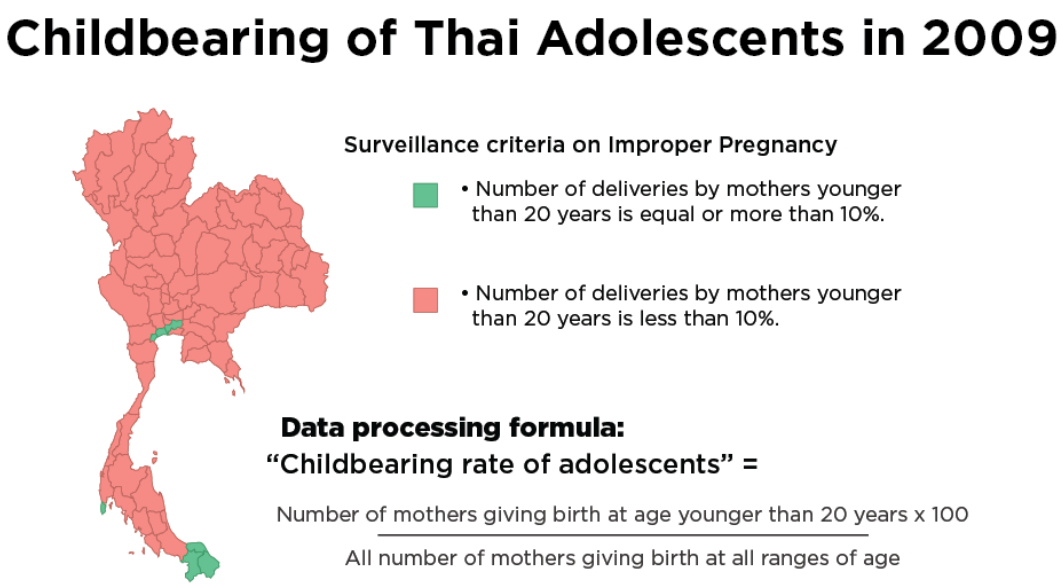
Graph 3: Rate of condom use in the first sexual intercourse in studying at Muttayom 2, Muttayom 5 and 2nd-year vocational students in Year 2005, 2008 and 2011



Source: Bureau of Epidemiology, Department of Diseases Control, Ministry of Public Health, 2011

Graph 3 shows the rate of condom use in the first sexual intercourse of students studying at Muttayom 2, Muttayom 5 and 2nd-year vocational students in Year 2005, 2008, and 2011, it was found that the preventive measure by the use of condom for the first sexual intercourse of students in those three educational levels remained stable at 40-50% in males and females.

Figure 3: **Childbearing of Thai adolescents in 2009**



Source: Ministry of Social Development and Human Security, 2009

Figure 3 shows the childbearing of Thai adolescents in 2009 as reported by the Ministry of Social Development and Human Security. If observing the childbearing of Thai adolescents younger than 20 years, it is apparent that the impact excesses the indicator defined by the World Health Organization (less than 10%) for almost the entire country.

Subsequent social impact after adolescent pregnancy

Most adolescent mothers may not expect or predict the subsequent disadvantages in case of their unplanned pregnancy. The major negative effects to these adolescent mothers include:

- Adolescent mothers have some educational problems as they cannot return to the educational system or may return to it difficultly.
- Adolescent fathers or mothers may be unemployed due to no knowledge or education.
- Adolescent mothers have no guardianship and child-rearing skills.
- Adolescent mothers have risk behaviors in the use of substance, and they have chance to be re-addicted to it.
- Children of adolescent mothers encounter the high rate of morbidity and rate of mortality, as well as development problems.

The above problems are the reinforcing factors causing the children of adolescent mothers to be neglected or

not be properly cared or it is likely that the children are abused by adolescent mothers or guardians.

Impact to teenage mothers

• Rate of Mortality.

According to studies, the rate of mortality during the birth delivery of adolescent mothers is higher than older women. The teenage mothers younger than 15 years encounter higher rate of mortality during the birth delivery than teenage mothers older than 20 at the significant statistic.

• Child Abuse.

Adolescent mothers have no guardianship and child-rearing skills; so it is risky to have the child abuse.

• Repeated Pregnancy.

About 35% of adolescent mothers would have the repeated pregnancy within two years after the first child. The repeated pregnancy when the adolescent mother is not ready; this affects her care for the first child, and inevitably gives the negative impact to the adolescent mother's living.

• Low Socioeconomic

The adolescent pregnancy takes other key social effects to adolescent mothers and children. It was found that some of these adolescent mothers could not return to the educational system or could return to it difficultly, which results to their unemployment, because of no educational certificate. The adolescent mothers neither have the guardianship and child-rearing skills; it is risky to have the child abuse.

Problems and solutions to sexual behavior and pregnancy of adolescents

Microsystem

Strategy for youth space

The youth space has no good management enabling the youth to seek for themselves or spend time creatively. In addition, the community and society have not yet understood how to work with the youth; the adults usually think for them. What the adults should do is to allow the children to develop and understand their own development, seek for themselves, and understand sex issues accurately.

Strategy for life skills and mindfulness promotion activities (Life Skills Enforcement Process)

One important issue is that the Thai society holds specific attributes, that is, **it has no structure of spending time for self-development,** which is the modifying factor.

Strategy of knowing about sex by family studies – Sex education both in school and at home must be revised. The school measurement system should not focus on the academic achievements only, but the integrated youth development must be formulated. The sex education must be provided to every teenager so that they understand various sex issues; for example, physical development and changes during puberty, sex role, reproductive health, sexual intercourse omission, safe sex, types of birth control, etc. The adolescents should be trained for skills to be applied in real situations, e.g. refuse and negotiation skills, birth control skills, use of condom, etc.

Strategy to prevent sexual risks
by way of safe sex, no condom/no sex, use of birth control pills, access into friendly services provided by the Ministry of Public Health.

Strategy for access into birth control services

This means the access into the birth control tools and methods, and consideration for pregnancy or even safe abortion; all of these are the problems now. The adolescents cannot reach the consulting service or birth control service as they deny the hospital, and there is no connecting point between the adolescents' assembly and access into the preventive service or birth control, which is the weak point. The health service system should try to persuade the adolescent mothers not to abort because there are few safe abortion service places, and this issue is still dubious whether it is lawful, unlawful or ethical or not.

Strategy for repeated pregnancy in adolescent mothers

An integrated care for adolescent pregnancy should be provided, starting from the period of pregnancy up to delivery. During the pre-natal period, the service should be easily approached and the adolescents should receive the friendly care so that they receive the antenatal care regularly while the pregnancy complications are prevented or minimized. There should be the postnatal visit to promote the adolescents to have the right child-rearing, and to mitigate the risk of child abuse or child neglect. The efficient family plan should be promoted as well while these adolescents should be pushed back to the educational system or be employed in order to mitigate potential social problems.

What Thailand severely lacks at the micro system

is to keep adolescents' confidential information, which is the heart of care for adolescents attracting them to use the service because they feel sure that their information will not be disclosed to other parties, either family, close persons, surrounding persons. However, for the working system in the country, when an adolescent asks some advice on her pregnancy, this must be reported to her parents. This is different in the United States because the parents will know the matters causing the death of their child only; for example, the child wants to commit suicide or anyone harms the child. It is required by law that the close persons must be informed of these. For other matters, the law prescribes that they are the adolescents' personal information. If such information is reported to the parents, the child is entitled to sue the doctor. Information privacy is the key factor attracting the adolescents to ask for some advice, especially on birth control pill.

Mesosystem

The Department of Health establishes the Youth-Friendly Clinic to fill the gap between the hospital service and the adolescents' assembly corners, either in school or community. The model success story sets up the youth-friendly service in various assembly corners, e.g. residence or dorm for an easy reach. The service point is not only established and waits for teenagers. Meanwhile, if interviewing the service providers at various community-based hospitals, they usually told us that the public health service personnel have no

communication skills with teenagers. The communication with adults about health problems and talks to teenagers about many issues are so different. Therefore, the service model still has some problems that the clinic cannot attract the service users while the service providers have no service skills.

The global AIDS fund, PATH, has a good model for sex education, which is one factor of success. The youth-friendly service is one of its successes, but it has not been successful yet. Having the sex education as one factor of global success could not be interpreted to be the measure/standard at the school level caused by adults' attitude, school culture, and traditional work frame to be difficultly changed, etc. The effective preventive adolescent pregnancy program should be tailored to fit to the adolescents, especially to change their behavior and to be practical in their daily life. This work should be done by the multi-professional team to reduce the incidences, unplanned pregnancy and repeated pregnancy in adolescents.

The assistance strategy by certain agencies,
e.g. emergency home, self-development to go back to the school, family and social system.

The strategy for monitoring/ handling risks,
e.g. media, assembly corners by setting up the monitoring center linked to the public sector in each community.

Macrosystem

•Administrative structure
must be decentralized. The power of each ministry must be reduced, especially the Ministry of Education. The school assessment criteria must be revised as well by focusing on youth development. The national structure must link the administration of all ministries cohesively. The ministerial direction should not be separately designed, measured and carried out by each ministry. The structure must also involve certain academic institutes to handle this matter, which leads to the linkage of all ministries in order to enhance the nationally linked information. It is certain that this information must link with the courses of research, model searching, and compilation of success factors or models to drive the structure-level working of the government mechanism.

• Welfare provided by authorities.
For example, in the United States, the Government provides the sex health service such as various birth control services, antenatal service, advice on sex health, etc. According to studies, the degree of adolescent pregnancy in the United States was so high if compared with other developed countries like European countries or Japan. The cause of this incidence is that the United States is an open country with the social inequality in all social levels. Nevertheless, the childbearing rate there has been decreasing. One important solution is that the Government provides the sex health welfare as well as the Youth-friendly Clinic for adolescents; although the information about legal abortion is still rare.

"One important matter for the personnel working about sex for adolescents is to build good understanding and attitude for the society. Not be struck that everything must go on like the past as the world is changing every day."

(Jiraporn Arunakoon, 2013)

Adolescent Pregnancy Prevention

The World Health Organization gives preventive measures for adolescent pregnancy and reduction of complications caused by adolescent pregnancy for the developing countries as follows:

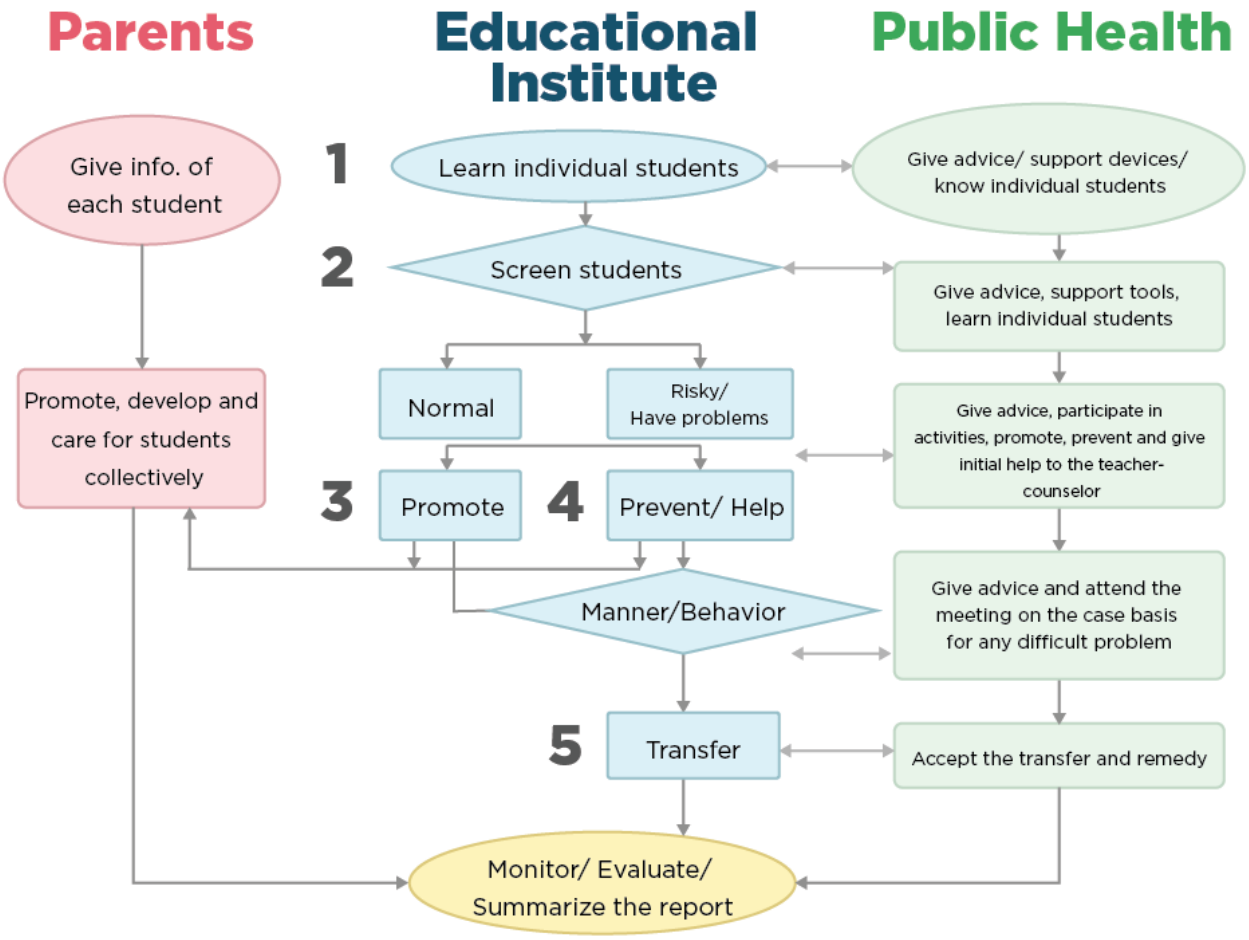
1. Reduce the marriage in teenagers younger than 18 years old
2. Reduce the pregnancy in teenagers younger than 20 years old
3. Increase the efficient birth control in teenagers risky to pregnancy
4. Reduce the disagreed or compelled sexual intercourse
5. Reduce the unlawful abortion
6. Increase self-care skills in teenagers during the prenatal and postnatal periods

The programs used to prevent and reduce the incidences of adolescent pregnancy are as follows:

1) School and Hosptial-based Programs

The operating mechanism together with the student care network system linked with the public health service system (Figure 4) is driven by 3 core sectors: parents, educational institute, and public health. All these three sectors are involved in developing and helping the students under 5 main steps: 1) learning individual students; 2) screening of students into a normal group and risk group; 3) promotion and development; 4) prevention and help; and 5) transfer.

Figure 4: Operating mechanism together with the student care network system linked with the public health service system



Source: Institute of Child and Adolescent Ratchanakharin Mental Health, 2012

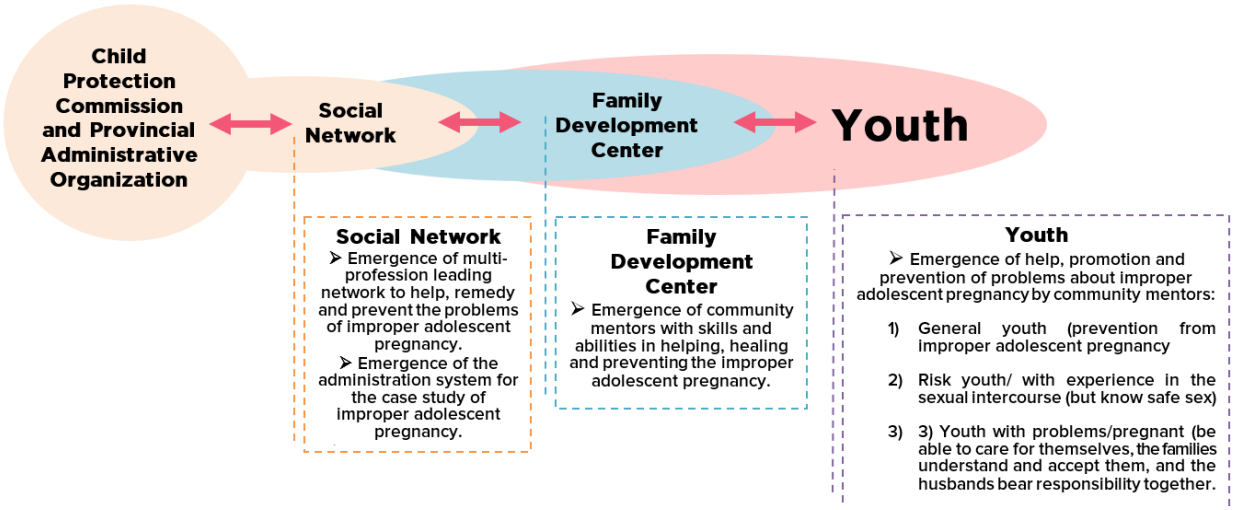
2) Community-based Program

The adolescent pregnancy is a critical problem possibly occurring in both normal and risk groups of youth. Although, at present, the problems of unplanned adolescent pregnancy are concretely solved, including help and medical treatment by many nursing centers, help and care system for students in various educational institutes, and increasing the potential of the Family Development Center (under responsibility of the Office of Women's Affairs and Family Development, Ministry of Social Development and Human Security), which are the government mechanisms and closest to the family and community institutions. They should be the important components, and may become a solution for the unplanned adolescent pregnancy, and integrate all related problems. The potential development of the Family Development Center deems an integration of affairs to solve this problem constructively. One important thing possibly resulting to more tangible problem-solution

is the construction of model or pilot area to be a working example for all other areas. Nakhon Pathom was selected as the targeted area for this program before expanding it to the public.

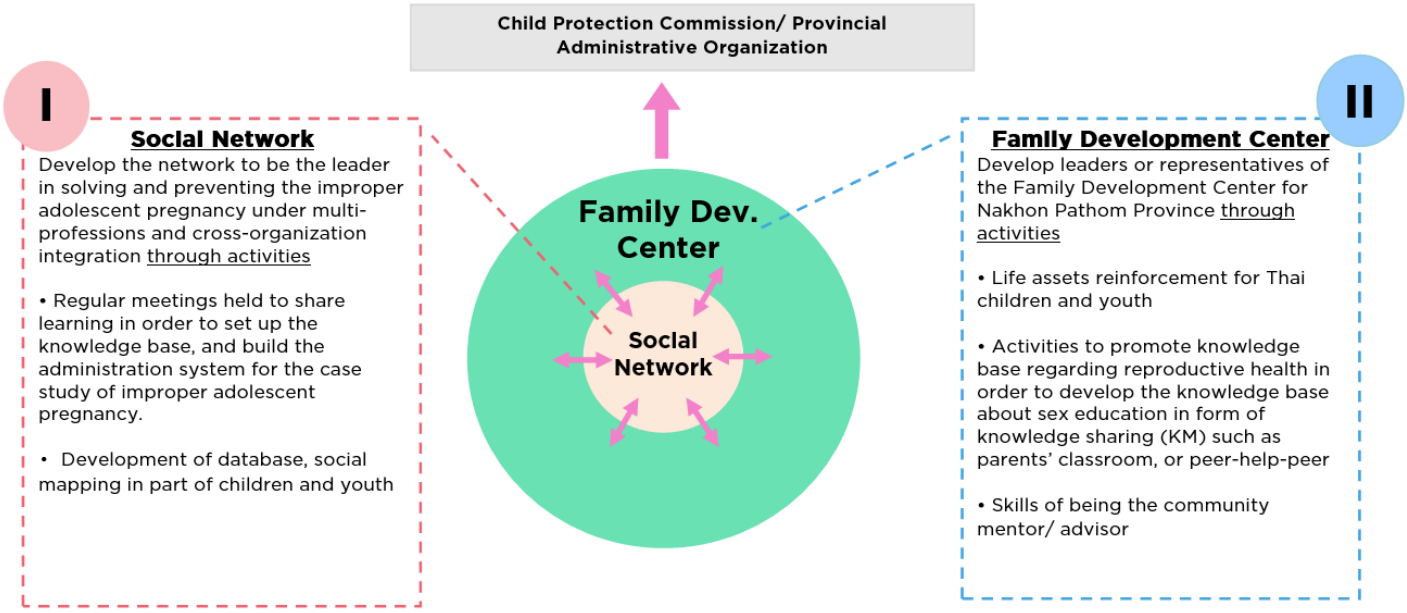
The unplanned adolescent pregnancy is a critical problem to be necessarily involved by every related party. The previous working is tangible in some extent, but the linkage and knowledge sharing between related parties, either from the state sector, private sector, or community representatives, could arouse more substantial working. Therefore, the main objectives of this program are to boost the potential of work mobilizing and strengthen the Family Development Center, to set up the network for learning or knowledge market together to be ready to promote and prevent any problems efficiently, and to enhance the substantial work performance and sustainable working system.

Figure 5: Targets of developing the Family Development Center and multi-professions to prevent and solve the unplanned adolescent pregnancy from the provincial level to the local level



Source: Lesson-learnt in the joint knowledge sharing process of related multi-professions in Nakhon Pathom supported by the National Institute for Child and Family Development, Mahidol University, and the Office of Women's Affairs and Family Development, Ministry of Social Development and Human Security by Dr. Suriyadeo Tripathi et al.

Figure 6: **Activity plan and model for the development of Family Development Center and multi-professions to prevent and solve the unplanned adolescent pregnancy from the provincial level to the local level**



Source: Lesson-learnt in the joint knowledge sharing process of related multi-professions in Nakhon Pathom supported by the National Institute for Child and Family Development, Mahidol University, and the Office of Women's Affairs and Family Development, Ministry of Social Development and Human Security by Dr. Suriyadeo Tripathi et al.

The development of Family Development Center and multi-profession team to prevent and solve the unplanned adolescent pregnancy at Nakhon Pathom Province aims at improving the work efficiency of 2 targeted groups: social network group, and group of leaders/ representatives of the Family Development Center. The work efficiency should take effect to the solutions and prevention of unplanned pregnancy in children and youth. Next, the Center's working development will be systematic and sustainable as supervised by the Child Protection Commission/PAO (Figure 5). The Center's operation is performed through important activities, resulting to the prevention and solution of unplanned adolescent pregnancy (Figure 6).

Preventive strategy and solutions for unplanned pregnancy of children and youth by the Ministry of Social Development and Human Security

1. Strategy of Prevention to enable the children and youth to acquire knowledge, and to recognize the appropriate opposite-sex relationship under the involvement of family, school, community, and network. For this strategy, there should be the curriculum about sex education appropriate for

each range of ages, coordination to prevent the unplanned pregnancy in children and youth, and assistance offered to young mothers.

2. Strategy of Assistance and Rehabilitation to enable the children and youth with unplanned pregnancy to receive some help, knowledge and essential skills, and appropriate advice during their pregnancy and delivery, and to prevent the repeated pregnancy. There should be some measures encouraging the responsibilities of male adolescents, and giving young mothers the chance to continue studies or receive other alternative education.

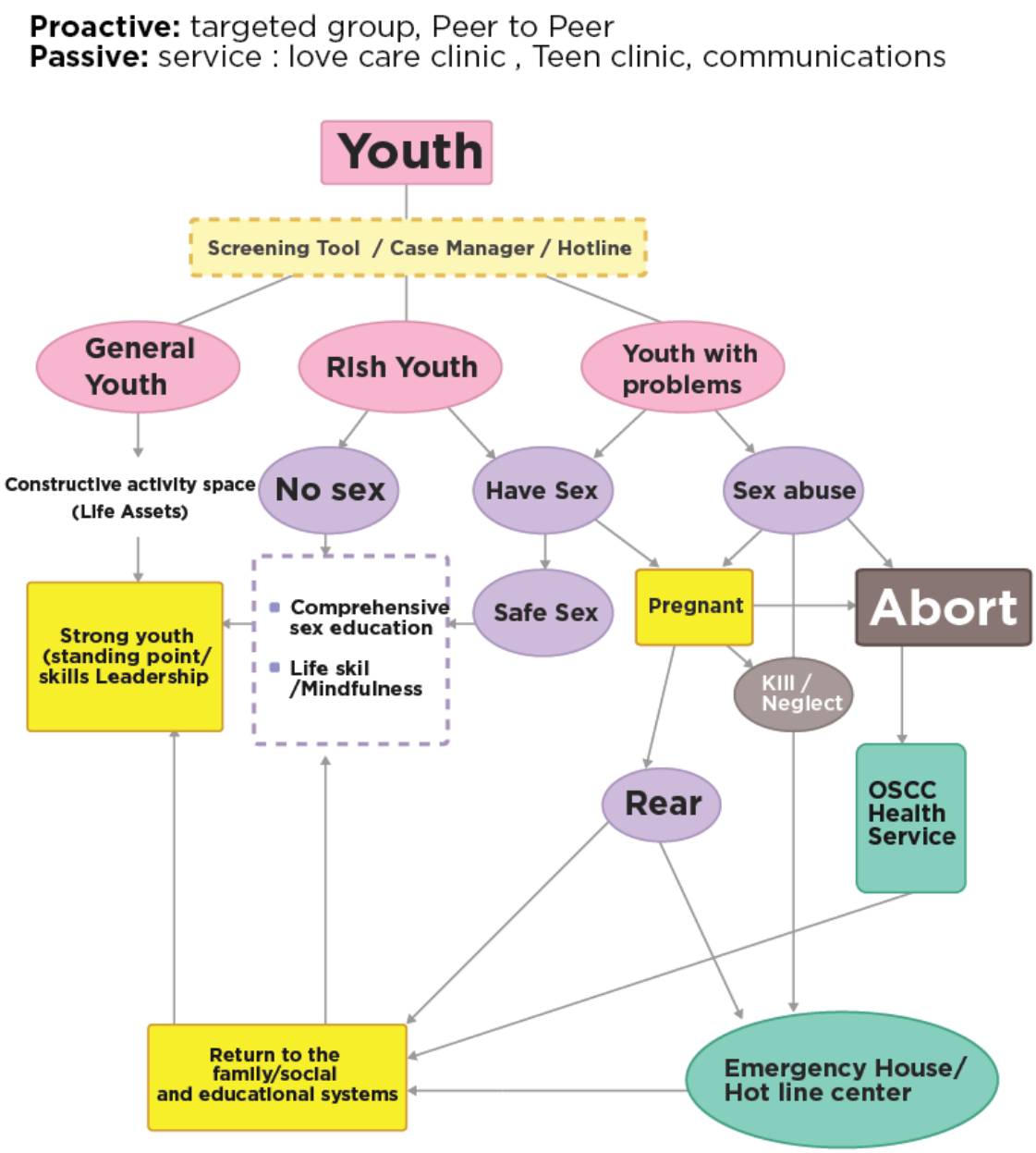
3. Strategy of Role and Knowledge Promotion for groups influencing the children and youth's thought. The thought-influencing groups are the contexts around children and youth, either family, community, mass media, or network, which should achieve proper roles and knowledge base more. Also, the knowledge base and skills of child personnel should be improved for the work integration in assistance and rehabilitation affairs.

4. Strategy of Eradicating the Incitements and Media Influence. The environment inducing the adolescents to have the sexual intercourse at the immature age must be wiped out by using the strict measures. In addition, the mass media institutions must have the social accountability and kindness to children and youth.

5. Strategy of Policy Implementation. The policy on the prevention of unplanned pregnancy in children and youth must be set up as the national agenda in conjunction with the Child Protection Act, B.E. 2546. The work with other networks at the provincial and local levels should be integrated as well.

6. Strategy of Information Survey, Working System Improvement and Work Performance Monitoring. There should be the database on pregnant children and youth at different ages so that the data analysis could point out the cohesive problems. Then, the data should be presented and applied to fit to each area context. The working system, knowledge management, and research should be improved as well in order to enhance new innovations. Importantly, the strategic implementations at any levels must be monitored concretely.

Figure 7: **Chart presenting the care of all targeted groups of youth from the impact of adolescent pregnancy**



Source: Suriyadeo Tripathi. Adolescence, Pregnancy and Premature Infant. Challenging Problems. Paper for The 3rd Academic Annual Meeting for Year 2010 in the Project on Health of Mothers and Child for Families of Thai Children and Youth under the Royal Patronage of Her Royal Highness Princess Srirasm, Royal Consort to His Royal Highness Crown Prince Maha Vajiralongkorn


I want
to tell
you !!!
I
you
So much

ADOLESCENCE AND SUBSTANCE USE

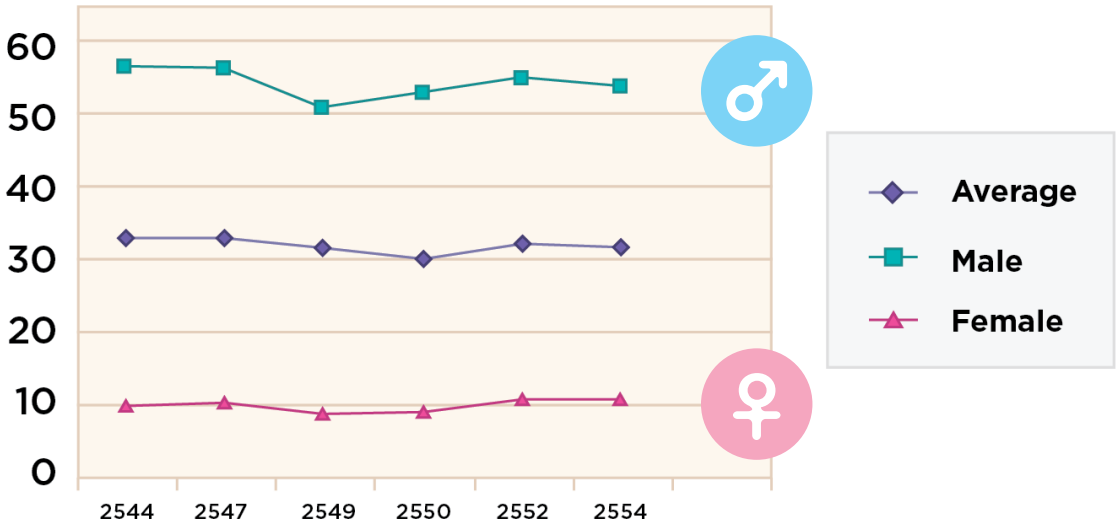
Adolescence is an age of good health. What mostly affects the adolescents' health are certain risk behavior that may take effect to their life and health, both in the short term and long term. Such risk behavior also results to self-development of these adolescents. At present, the society and the world have great advances in several fields. The adolescents are at the age of absorbing any innovations easily; so they get both chance and impact by these changes. The use of substance is one risk behavior influencing health, society, and community in the long run.[1]

For the situation in the use of substance in Thai adolescents, it was found that the consumption of alcoholic beverages, tobacco, and use of substance by adolescents has been increasing. It was also found that, among young adolescents taking substance, they started using the substance younger than other groups at different ranges of age. The addictive substances most used were the alcoholic beverages, smoking, and substance use respectively.

Alcohol

It was found that the consumption of alcoholic beverages in Thailand for the past 10 years has been constant. In 2011, about 31.5% of Thai people drank alcoholic beverages. Most drinkers were male. The proportion of male drinkers and female ones was 5:1. But, the proportion of female drinkers has been increasing.[2]

Graph 1: Comparison of alcohol drinking by populations older than 15 years old as classified by gender from Year 2001 - 2011



Source: Survey of smoking and alcohol drinking behavior in 2011 by the National Statistical Office, Ministry of Information Technology and Communication

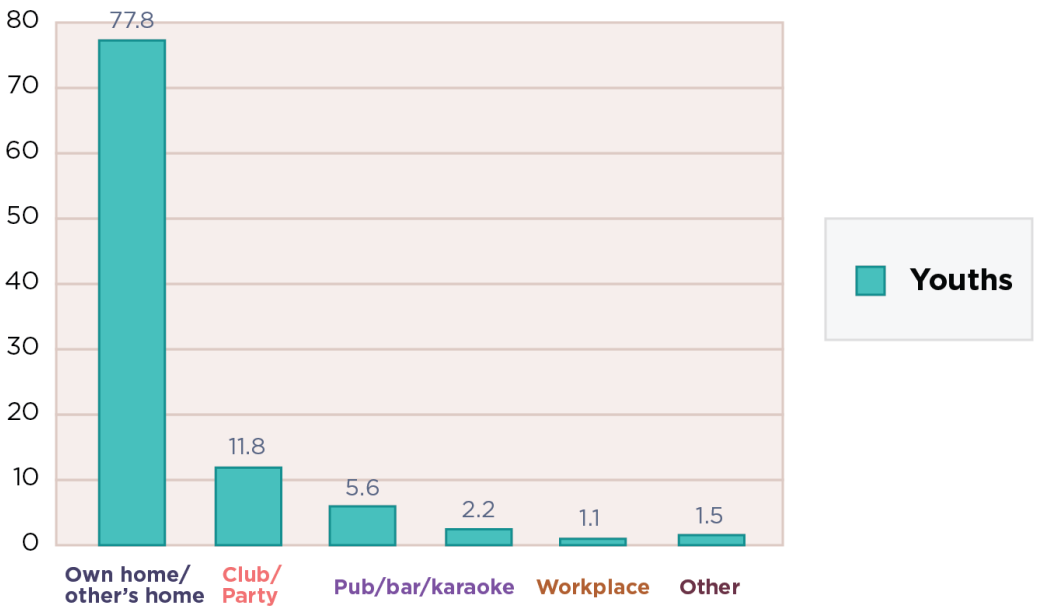
The youths aged between 15-24 years consuming alcoholic beverages accounted for 15% of total drinkers or 2.5 million persons. About 40% of male youths and 6.6% of female youths consumed the alcoholic beverages. The proportion of this group jumped from 21.6% in 2001 to 23.7% in 2010. It was also found that the prevalence of regular consumption of alcoholic beverages in youths aged between 15-19 years increased for 70% in a period of 10 years.3 For youths aged between 15-19 years, they started drinking alcohol at the age of 16 on average, which was the lowest age of first alcohol drinking if compared with the drinkers in other groups of age. The region holding the highest prevalence of alcohol drinking was the north, followed by the north-eastern region and the central region respectively.

The graph shows that about 8% of adolescents aged between 11-19 years drank alcohol, and the proportion of male adolescents to female adolescents was 9:1. From surveying the secondary-school students in 2009, the average frequencies of drinking for male and female adolescents aged 11-12 years were 5.4 and 3.1 times per month respectively. About 53% of adolescent drinkers had the binge drinking. It was also found that this group of adolescents started drinking alcohol when they were at 14 years of age, on average.

For alcohol drinking of Thai adolescents, they preferred drinking in group at home with others, friends or relatives. They obtained the alcohol beverages from other persons or bought them. The factors relating to the

consumption of alcoholic beverages included the social value that the alcohol drinking was normal, opening for the advertising media, having friends or family members who were drinkers, and living in the community enabling or accessing into alcohol beverages easily. It was found that the youths whose both fathers and mothers consumed the alcohol beverages were likely to consume the alcohol beverages higher than the youths whose both fathers and mothers did not consumed the alcohol beverages for 1.94 times. The youths whose parents did not ban their alcohol drinking were more likely to be the drinkers than the youths banned by their parents for 4.92 times.

Graph 2: Alcohol drinking by Thai youths in the past 12 months as classified by place of drinking (survey in 2011)

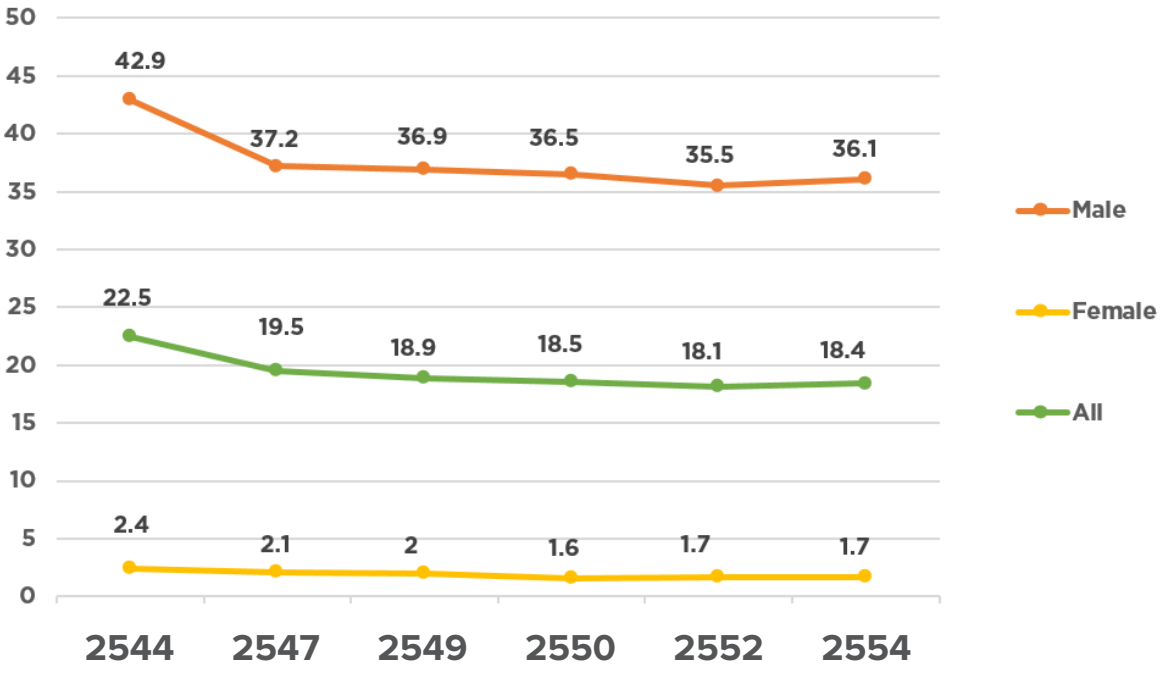


Source: Survey of smoking and alcohol drinking behavior in 2011 by the National Statistical Office, Ministry of Information Technology and Communication

Tobacco

In 2011, about 21.4% of Thai people had smoking, and 86.1% of smokers had the regular smoking. Most smokers were male, and the proportion of male and female smokers was 20:1. In the past 10 years, the number of smokers has been decreasing, but, in the group of youths aged 15-19 years and 19-24 years, they tended to have more smoking. For the youths aged between 15-19 years, whose rate of smoking was lowest in 2001 at 6.44%, their smoking rate increased to be 10.77% in 2011.

Graph 3: Comparison of smoking in populations older than 15 years with regular smoking from Year 2001 to 2010



Source: Survey of smoking and alcohol drinking behavior in 2011 by the National Statistical Office, Ministry of Information Technology and Communication

The adolescents aged between 11-19 years who were smokers accounted for 4.9% of total smokers or 570,000 persons. 77.8% of these adolescent smokers had the regular smoking. The proportion of male smokers to female smokers was 50:1. In the group of adolescents aged between 15-19 years, the average age of first smoking was 15.1 years, which was the lowest age of first smoking if compared with the smokers in other groups of age. The region with the highest prevalence of smoking was the north-eastern, followed by the central region and the northern region respectively.

From the survey of smoking in male secondary-school students aged between 11-14 years in 2006, one-thirds of these students smoked and agreed with smoking; so they were more risky to smoking at the initial stage for 2.16 times than those disagreed with smoking. The factors correlated with smoking were the inducement by peer, low awareness of self-ability in giving up smoking, and having friends who smoked. From surveying female smokers aged between 15-25 years, the causes of smoking were the imitation of friends, stress mitigation, and inducement by friends. The interesting issues were that about 20% of female adolescents smoked as they had free time and had nothing to do; so they smoked.

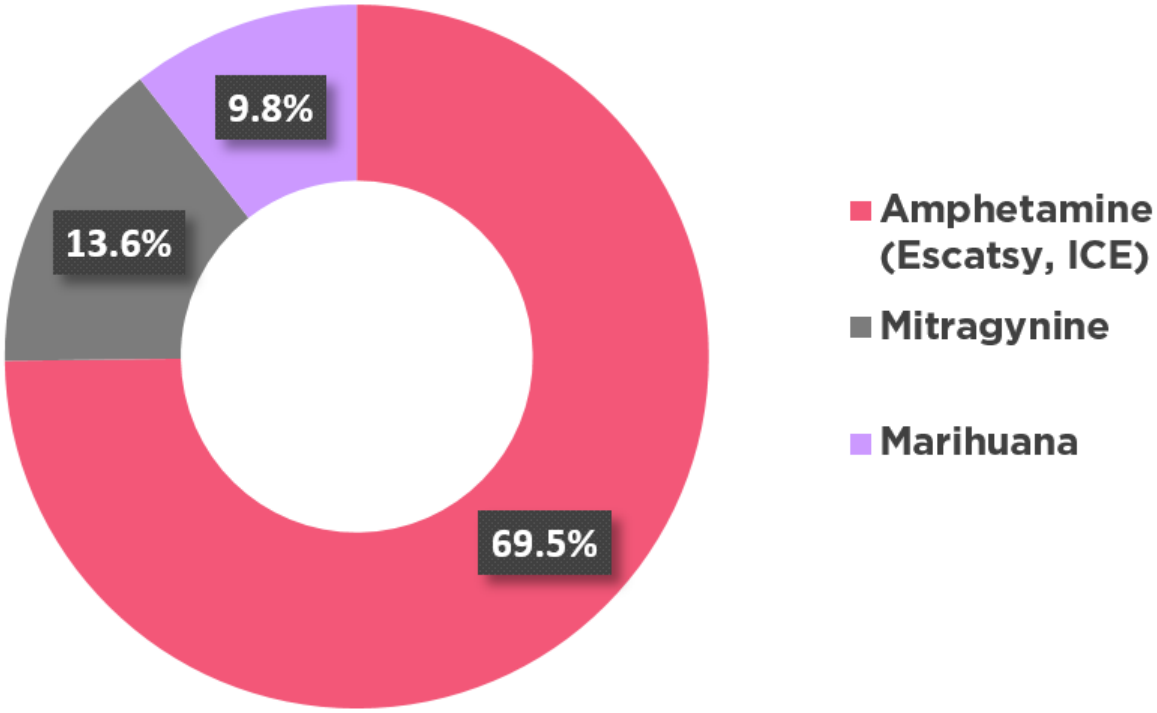
Substance Use

From estimating the number of persons involved in substance use in 2011, it was found that, about 7.3% of them had experience in using the substance. The Marihuana, Mitragynine and Amphetamine were the first substance most used by these persons. The use of substance tended to be increasing from the previous year, and it was found that the use of substance increased in groups of women and youth.

From the statistics regarding children and youth committing offences relating to substance use in 2011, there were 13,845 adolescents accused in these cases or an increase of 26.9% from Year 2008. Most cases (69.5%) related to the substance in types of Amphetamine (Amphetamine, ICE, Ecstasy), Mitragynine (13.6%) and Marihuana (9.8%) respectively. The number of accused offenders increased for 27% in 3 years. The tendency of cases regarding Ecstasy and ICE increased in each year while the cases regarding Mitragynine and marihuana decreased.

From the brief summary on operations in narcotic treatment and rehabilitation in 2010, there were 15,392 addicts who were younger than 18 years or this accounted for 13.5% of all addicts receiving the addiction treatment. The top three drugs they took included Ecstasy, marihuana, and inhalant.

Graph 4: Statistics of children and youth charged in an offence relating to substance use in 2011 as classified by types of substance use



The above data shows that the use of substance in Thai adolescents has been increasing either drinking alcoholic beverages, smoking, or use of substance. The age of first using the substance was likely to be younger while the tendency of using the substance in women was higher. However, the rate of diagnosis and medical treatment was slight. Most teenagers used the substance due to curiosity, society and environment not allowing them to have constructive activities, social pressure, and need of acceptance from friends. Some adolescents used the substance as they felt better from stress, anxiety, boredom, emotional or psychological problems. When the children and teenagers try the substance, they have more chance of addiction as well as problems caused by substance than others at different ages because most of them are unaware that they are addicted to substance. But, when using the substance, whether addicted or not, it takes effect to their general relationship with guardians, surrounding people and society.

The use of substance in adolescents affects their thought, learning, meditation, memory, and decision-making; so they have some improper behavior, low academic achievements, dropout or work dismissal and risk to the unplanned pregnancy, sexually transmitted diseases, and use of violence or abuse, which cause some consequent accidents. In the pregnant adolescents, the use of substance affects the pregnancy, that is, the mother may have the premature delivery and the infant may be underweight, which take effect to the child's low intellectual quotient. When the parents' use of substance affecting their child, that family will be full of chaos and stress, and it is risky that the child may be neglected or abused.

At present, it is widely known that human brain has been developed up to the age of 20 years. The brain development is great during adolescence. During this period, if the brain is affected by the use of substance, it results to the long-term brain development. The alcohol drinking since adolescence affects the brain in part of brain functioning abilities, characteristics and size of brain sector that functions for memory and affections in the long run. The use of substance also changes a drug user's brain in part of risk and reward recognition. If being addicted, he will have the brain and behavioural disorder.

The nature forms the adolescents up to be curious for their self-development. But, trying and using substance give the adverse effects. Therefore, the prevention from the use of harmful or harmless substance is so crucial. Any persons taking preventive roles should focus on the prevention or reduction of risk factors while supporting the preventive measures from the drug addiction. Some of these factors are presented in Table 1 below. If considering the preventive factors, it is apparent that several matters start at the family, community, and education. If these social institutes are strong, have appropriate attitude and organization culture, and are fully supported, they would greatly help protect the narcotic problems in adolescents.

Adolescence is an age of opportunities in learning and self-development, which leads to the development of family, community, country, and national future. This age is full of energy, courage, and initiative. The adolescents should have chance to test their abilities constructively, depending on each adolescent's skills. The adults have duties of providing correct information, encouraging or advising them to find out

wonderful things and abilities hidden in them until they achieve their self-esteem. This could be shown out by behavior or actions. The adolescents need not to adhere to the physical appearance, slovenly matters or trying any risk behavior for temporary good feeling, or they need not to attract attention but harming themselves.

Table 1: **Risk factors and preventive factors for narcotic addiction in adolescents**

Risk Factors	Level	Preventive Factors
Aggressive behavior	Individual	Good self-control
No social skills	Individual	Good social relationship
Estranged from the parents	Family	Receiving care from the parents
Use of narcotics	Peer	Good-learning abilities
Easy access into narcotics	School	Narcotics suppression policy
Poverty	Community	Good relationship with the community, strong community


ANA
PATROL

“SUCH AN ORILE WHO LIES DOWN TO REST WHENEVER IT GETS DARK”: VIOLATION OF CHILD RIGHTS AND STREET CHILD PROBLEMS

Street Child Situation in 2013

Actually, the street child problem was first tackled around Year 1988 – 1991 when there were 2,736 street children under the care of some government authorities and private organizations. This record was an official survey, but there were many off-the-record street children. In 1992, the network organizations for street child estimated that there were 13,000 street children around the country (Wanlop Tangkhananurak, 2013: interview). From that time, the number of street children has been increasing, but the situation remains unchanged, that is, no one knows the actual number of these children. From Year 2003-2005, it was estimated that there were 14,000-16,000 street children all over the country or an increase of 10 times from Year 1988. This increasing number could not be curbed. It was estimated, in the following year or Year 2006, that is, this number reached 20,000. From Year 2009, there may be not less than 30,000 street children, both Thai and alien. These children are exploited as they blind to the situation and become victims in human trafficking, labor trafficking, and prostitution.

Types of Street Child

Street children in Thailand may be classified into 2 groups:

1. Street children by family path

– This group of street children looks like "gypsies" that travel or migrant to earn for living in many areas. This group of children migrants with their family to seek for new jobs, e.g. in sugarcane farm, rubber plantation farm, and general construction site, as well as being the beggar for money and sleeping on streets in big cities. At present, there are more foreign street children, e.g. Burmese, Khmer, etc. These children still live with their families and are aware of their family sorrow or happiness.

2. Street children getting away from family

– Most of these children are severely driven by their own families such as family shortage and difficulties, regular scolding and beating, compel for hard work until the children could not put up with these conditions; so they run away from home to everywhere, and struggle for survival.

As mentioned above, the actual figures of both street child groups is beyond estimate. The number of the first group of street children may be estimated close to the actual figures, but it's more difficult for another group because they move freely to anywhere. But, both groups of children have different risks as identified below.

Street children by family path	Street children getting away from family
Risks and Quality of Life	**Risks and Quality of Life**
• Under-standard residence, dangerous to a certain extent	• No residence, and more dangerous than the first group due to the enticement or inducement to the vicious cycle of narcotic taking and sex service
• Frequent house moving; so children lose opportunities for studies and development	• Risky to accidents and crimes on street
• Problems about residential safety	• Malnutrition and illness caused by the environment and street dust
• Malnutrition	
• Frequent illness due to inappropriate environment for children	

Street child by family path and factors ruining the quality of life of children

Soipetch Boonnoi, girl, 3 years, was dead as she fell into a hole dug for the pile on February 3, 1985. Pongthep Thavipak, boy, 2 years, was dead by his innocence when he drank some thinner of his father who was the painter on December 24, 2010.

Among street children by family path, the children of construction workers reflect the most relevant factors destroying the quality of life of children. It is presently estimated that this group of children may reach 30,000. The factors destroying the quality of life of these children include:

1. Environmental problems

1.1 The dwelling or residence of construction workers is a two-storey small house to limit the construction area. It is usually made from wood or corrugated iron, without any windows or air passage so it is pitch-dark, smelly, airless, and no light. This house is for the temporary living. In some construction sites, the roof may be leaking; so the workers cannot sleep. In some sites, the residence is the container drilled for doors and windows; so it's so hot, narrow, and every corner is covered with steel sheets. This is dangerous for children when they are running up/down as the small steel sheets may injure them easily. In addition, at the house basement, it is always flooded and muddy due to no drainage ditch; so it becomes the refuse disposal provoking some odor and a lot of mosquitoes. The dust also diffuses due to key construction materials.

1.2 A construction site is a place of all vices, either gambling, playing cards, Hi-Low, substance, or alcohol. There are always quarrels in families or with neighbors due to the congested residence. There is neither playground at any construction site. Subject to these limitations, the children may see any improper behavior of adults, and imitate it; for example, the child is assigned to observe at the entrance of the gambling place, or to mix the liquor and soda, or the parents do not have the sexual intercourse in a private place, etc.

2. Health problems

2.1 Malnutrition in children of construction workers is usually found resulting by low family income and not having the nutritional meals. For example, the children usually have some simple and cheap food, e.g. instant noodle, canned fish, fermented rice noodle, etc. The children drink some dirty water coming from the same source of water used for the construction work. Some children have no breakfast or dinner, and some parents solve this problem by buying some desserts or soft-drink for children as advertised via television.

2.2 Illness caused by many diseases. As the children of construction workers must live in those construction sites, they are usually sick caused by dust, air pollution, sound polluted by machines, refused water,

scattered waste, germs or many carrier animals, e.g. mosquito, fly, rat or cockroach, etc. Naturally, the child body's hygiene depends on the parents' care. But, the children of construction workers do not receive the good care; they have dirty nails, dented teeth, and impetigo. As the children do not like to have shoes on, their feet are frequently pierced by nail or steel.

2.3 For medical treatment and vaccination, because of low family income, frequent migration, and no knowledge about the medical treatment, the treatment to these children is inappropriate, either getting necessary vaccines, drug taking, seeing the doctor, etc.

3. Family problems

The construction work is to use the labor for wages. Although the minimum wage is fixed, the actual payment may not be subject to it. The income the construction workers receive, especially alien workers, is usually insufficient for their expenses. Thus, the shark loan or credit system at the construction site is a normal event. The workers have the right to put signature to buy some fresh-instant food in expensive prices before making payments later when the installment payment is made. When the income cannot balance the expense; the labor parents must work harder. Sometimes, they have the overtime work (O.T.) until it's very late at night without holidays. As a result, the children are left to live alone at the shelter; meanwhile, they need adequate love, warmth and attention. Hence, these children have severe problems of physical development, emotional development, social development, language development, and age-based expressions.

Besides, the family quarrel is a critical problem because it may lead to beating the child or the child must bear the parents' feelings. When the child is scolded and beaten, he will have stress and embarrassment, memorize and imitate these matters to solve his own problems in the future. The family quarrel comes from several factors. In several families where the parents are divorced, the father and mother have the new spouse; so the violation against child rights by beating, sexually assault or others can be seen in this case. After the parents' divorce, the child may be reared by the grandparents. Certainly, the grandparents are unable to replace the mother's love. As a result, the child would have the high emotional and behavioral problems, and he will have the emotional disorder when he grows up.

4. Educational problems

The parents or guardians working as construction workers must move the residence frequently when each job ends. The child must follow his parents; this causes him to be unable to continue studies, and to lack the educational development. The child must, at all time, adjusts to a new environment and new friends. His life is full of changes. He has no close friends, and must adjust to any new places. These circumstances delay his learning; so the child usually denies studying and becomes aggressive, etc. In several cases, the parents do not want to send their children to school because of several factors; for example, low income, unstable working condition, frequent changes of workplace, no awareness of the importance of education, etc. Meanwhile, some parents may send their children to school, but throw all care for children to

the teachers. They don't care for coaching and developing the children all together. After studying at school for a while, a lot of parents have the children drop out because of too high educational expenses. **The policy of 12-year free education is placed, but only the school fee is exempted whereas other expenses, e.g. food, cloths, learning materials borne by the parents, are quite high.**

The curriculum is another critical issue. **For children of construction workers, no specific curriculum is designed for them** who cannot have the continuous studies. However, most teaching and learning adheres to the single curriculum standard designed by the Ministry of Education for normal students in general schools, which is not appropriate or relevant to the lifestyle of children of the construction workers. Importantly, these children have so different characteristics. Some children must always start from the first step of learning. Some old children are still illiterate. Under a single curriculum, the teachers feel bored with teaching this group of children while the children are bored with studying as they cannot catch up with friends, feel ashamed, and feel bad to continue studying.

Except the aforesaid issues, the enrollment rules and regulations is another hindrance because the birth certificate, house registration, parents' marriage registration usually obstruct the enrollment because, generally, the construction workers change the residence frequently. Some families have lost the house registration; so the children cannot enroll. In some areas, the children must move to the educational areas for the right of enrollment. For this moving, the **parents must pay for the householder for the registration of child in his house**

registration. This expense is around Baht 3,000-5,000 Baht per child. When the parents have no money, they decide to stop their child's studying.

5. Safety problems

The children of construction workers must follow the parents to any construction site. When the parents work, the children must encounter many risks alone, either scraps of wood, nails on the ground, scrap iron, dug hole or pipe. These may cause the death of children immediately, and, in several cases, the children become disabled. For example, in 1983, a building under construction at Amphoe Lam Lookka, Pathum Thani, collapsed and buried 10 construction workers and another 5 children.

Predictable future of children of construction workers

According to the above information, **it could be easily predicted that most children of construction workers become the young unskilled labors.** The information from interviews gave a precise direction that the children in any construction site were instructed to do the construction work since they were young. Around the age of 10-12 years, most children helped the families earn for living by being the labors for digging, carrying, welded splices, painting, etc. Although the law prohibited the children to work, most parents took their children to the workplace as no one cared for them; so the children become their parents' assistants. Some of these children did not go to school. Although some might go to school, the frequent house moving indirectly forced them to drop out. The highest educational level attained was the primary/secondary level, which could not let these children get jobs from any other sources. Under this cycle, these children became the young unskilled labors**. It is highly likely that these children would be married and have children as they were so young, and they became "young parents" to create the new-generation children of construction workers** (as illustrated in Figure 1).

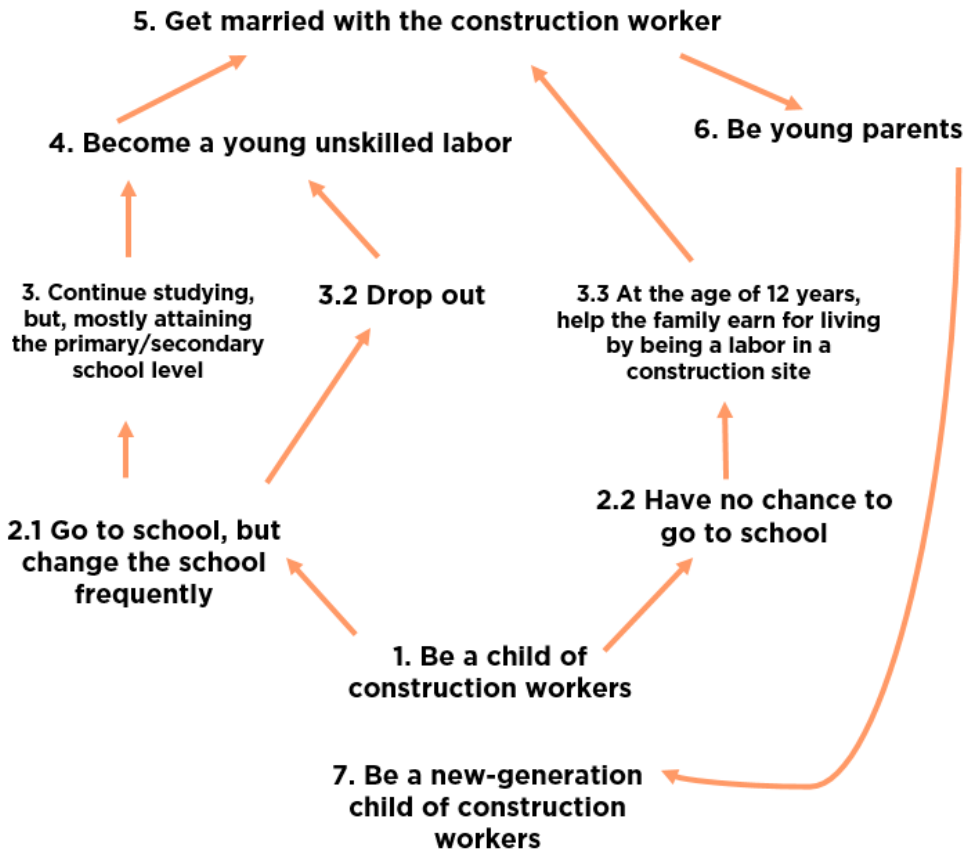


Figure 1: **Cycle of children of construction workers**

Street child getting away from family: reasons of choosing the street as a new "home"

The information from interviews indicates that the street children choose the street as their new home due to several reasons.

1. Economic factor in the street child's family.

For example, some families are poor and short; some parents get re-married; some parents use violence because the family income is insufficient to feed the children; the parents have several children; some children are assigned to work beyond their age and power until they feel unhappy. When growing up, they leave the families to have their own life.

2. Personal factor.

When some street children become teenagers, they are enthusiast, want to try, need freedom, want new and exotic experience, like to violate rules and regulations, and want to have their own gang as such group forming can serve several needs, e.g. warmth, respect, and feeling that someone understands and shares the hardship with them.

3. External Environment attracts the street children to all vices.

For example, for game-playing, some street children now eat and sleep in the game shop. All money earned is spent for playing games. This case is most found at Udonthani, Khon Khen, Chiang Mai, Chiang Rai, Chonburi, Phukt, and Bangkok. Along with coldness in the family, the group of street children occurs.

4. Problems from school or foster home or private development organization.

The school, sometimes, drives the children to be on street. The children may be punished by teachers unreasonably. The children feel ashamed when condemned they are bad students. This urges them to be bad in reality; they should not go to school or stay at home any more. Therefore, these children decide to be the street children. Some of them run away from the foster home as they quarrel with friends. Or, some run away from the private development organization as they dislike rules, and feel frustrated to live with many children.

5. Immature family.

This problem starts when a family is not prepared to have a child. After the delivery, the child is reared by other persons or it is ignored. For the divorced family, family quarrels or parents' re-marriage, when the child stays in such families, he feels like an excess of that new family. In some families, the fathers are drunk, act wildly, and beat wives and children until the children cannot put up with it. In the middle-class families, the parents contribute too much time for working that they have no time left for children. Some families may be so strict with the children that they feel bored and unhappy, addict to friends, and have sarcastic behavior by living on street. Some families are the street families; they instruct the children to sell some objects, beg for money, or sell flowers. When the children are old enough, they go to live with friends and earn for money by themselves.

6. Other reasons.

Except the aforesaid causes, there are other causes; for example, children stray from their parents, or they are lured or induced to be child labors, or some are sent to the fishing boat, compelled to be beggars or to watch over the beggar gang, etc.

Street child by family path and street child getting away from family and child neglect

For both types of street children mentioned above, either street children by family path like children of construction workers, or street children getting away from family to have a new "home" on street, this shows an absolute violation of child rights because every child is entitled to receive proper care and protection from parents/guardians in accordance with Section 19 of the Convention on the Rights of the Child, which specifies that, "1. States Parties shall take all appropriate legislative, administrative, social and educational measures to protect the child from all forms

of physical or mental violence, injury or abuse, neglect or negligence treatment, maltreatment or exploitation, including sexual abuse, while in care of parent(s), legal guardian(s) or any other person who has the care of the child."

By the principle of law, the child neglect refers to the unlawful care. This means that the parents do not "take care, exhort and develop a child according to the minimum standards as stipulated in the ministerial regulations, which potentially cause harmful circumstances to the child, whether physical or mental" (Section 23 of the Child Protection Act, B.E. 2546)

- The offender must be legal guardians as defined in the Child Protection Act, B.E. 2546 only.
- Such guardians omit their duties and responsibilities for child care.
- Such omission of acts causes either physical or mental harm to the child.

Child neglect is an enabling problem leading to child abuse and potential severe harm for children. The children may be lost, dead, injured, disabled or sick, traded as prostitutes, unlawful labors, traded as goods, or used as tools in narcotic matters. As our country permits to have 30,000 street children; this means that we agree with the violation of child rights and child neglect.

Children of construction workers and street oriole: proof of preceding policies

1. To handle any problem, we must, in principle, get the exact number of victims injured by such problem. This is the basic consideration for further actions.

Without the exact number, the solution is difficult.

Based on the interviews of street teachers and qualified experts, we have a precise picture that not having the exact number of street children in both groups clearly points out the government's insincerity in solving this problem. The figures of 30,000 street children have been referred over 10 years.

2. At present, there are many agencies working on this matter, namely, Office of the Social Welfare, BMA; Office of the Non-formal and Informal Education, Ministry of Education; Office of Local Education, Ministry of Interior; Royal Thai Police, etc. as well as private organizations such as Foundation for the Better Life of Children, Human Development Promotion Foundation, The Redemptorist Foundation for People with Disabilities, Child Help Foundation, The Volunteers for Children's Development Foundation, World Vision Foundation of Thailand, Child Protection and Development Center, and Baan Na Na Project. Having more than 10 agencies, both state-owned and private, reflects a deficient working.

The information from interviews reveals that most agencies working for children have the passive working system. With few people and many limitations, they are able to solve the confronting problems only.

"Most of our work involves the data collection and on-field working, starting from narrating and recording our experience because the working experience varies in each area. The focus is on reinforcing the working process with homeless children, adolescents with improper sexual intercourse, working with adolescent parents who are street children and deny stopping this status. We add some knowledge about child-rearing, food, vaccination as well as attitude toward young child care, etc. We also work on adding the process skills for volunteer teachers for street child, and for street teachers for knowledge base about AIDS, improper sexual intercourse, breaking against laws by street child, etc." (Interviewing Kru Jew on June 19, 2013)

Advice on practical handling

The problems about children of construction workers and street child can no longer be suspended because they have occurred so long and should be tackled by the existing mechanism. Waiting for the policy means that we must continue waiting and letting the children get the impact, which is the direct violation of child rights and it's unacceptable. By these reasons, I would like to propose some advice processed from interviewing certain qualified experts and related personnel working for this group of children. It is expected that such advice can be implemented and give results promptly under the existing structure and mechanism.

1. Because the exact number of street children in both groups is doubtful, the non-formal education teachers (GorSorNor teachers) should be assigned to survey this data so that the country holds the essential data for further actions. As we have GorSorNor teachers in every province and they work closely in each area, the data collection about children in construction sites may be possible.

2. Street teachers, urban volunteer teachers, social development officials, teachers for life skill development of street child under the supervision of agencies in the Ministry of Education, the Ministry of Interior, and BMA should be registered as the civil servants so that they have the security and esprit in working and helping street children promptly such as certification for civil registration, certification for medical treatment to street child, certification for school enrollment, etc.

3. However, two solutions above may not be enough so long as the society has no ideas to build a “child protection society”. Building the child-based society should be settled as a national agenda to have the relevant picture in the public, and to build a society where all kinds of violation are intolerant (Zero Tolerence).


12 x 12

POSITIVE POWER INNOVATION;

LIFE ASSETS

SOCIAL IMMUNITY FOR CHILD AND ADOLESCENTS

It is widely known that the adolescent problems, at present, are more severe, whether the use of violence, quarrels, immature sexual intercourse, adolescent pregnancy, substance, gambling, sex trading, and mental health problems such as depression, suicide, etc. These all cause a huge loss to life, assets, opportunities, and future. Besides, the Government must waste so many personnel and budgets to solve them.

The health care for adolescents, from past to present, has been the problem-focused orientation as we may consider that the adolescence is an age of risks; so the problem-solving is more focused than the problem prevention or the development of factors to prevent the problem emergence. As a result, in the past, a large quantity of resources, including budgets, personnel or research, both local and foreign, went to the problem-solving and the finding of any risk factors causing those problems. It was found that the problem-solving was so complicated and it needed a lot of experts, expenses and time, but the solving outcome may not be so good.

"Thai children have insufficient immunity because the Thai society has never focused or input positively. Thus, the process or mechanism could not function so effectively; the positive behavior does not occur" (Kua Kaewket, 2013)

For adolescents with no problems, it does not mean that they achieve full potential to encounter various challenges coming along with this age of change. The focus on problem-solving is not sufficient to build the quality youth for the development of future. This concept changes the perspective on the adolescent development. We not only expect that the adolescents desired would not provoke problems, but they also engage some of their positive power for constructive activities.

"To solve the teenagers' problems, we must arouse them to solve the problems by themselves. As done in several projects, either in the group of drug addicts or children in remand homes, they are ready to solve many problems by themselves. Therefore, in solving the adolescents' problems, we must not teach them, but encourage their inspiration. The adults just keep a watch on them; this does not mean that we tie with them. Do not instruct them. The parents must learn to get up to the teenagers at the present age" (Danai Chanchaochai, 2013)

"Love is a door first opens. Before giving others or anything, we must give love first. Love comes before knowledge. Love comes before everything. When a child recognizes and knows that he is valuable, he can continue by himself. This makes him love himself, have more faith and self-esteem. So, we will be able to create some Thai people with global visions. If we do not have this or do not allow the child to love in himself, he could not go on." (Danai Chanchaochai, 2013)

For the positive behavior of Thai teenagers, the first obvious issue is the volunteer or public mind projects as provoked by several crises, especially teenagers who could not stay indifferently and they offered some help, starting from Tsunami in 2005. These crises led to the formation of several public mind networks via websites or it is called the volunteer network or volunteer spirit. This group of teenagers used the social media to mediate these networks that utilize the teenagers' value and interest relevantly to the age. Consequently, the public mind activities look cheerful, powerful, and modern. Finally, the public mind activities of teenagers are not done at the national level, but linked worldwide. This is one distinctive point of teenagers using the existing tools and devices wisely until the public mind activities have been growing.

In the initial stage when this public mind networks occurred, Thai Health Promotion Foundation (ThaiHealth) prepared the mental health development plan to support this kind of activities by inviting many public mind parties to join as a solid network. The operations have been continuously done up to the year of 2006 as the 60th Anniversary celebrations of His Majesty the King's accession to the throne when the public mind was so prosperous. It was required that the public mind was one tool of changes; it was an approach of inner changes or self-development or strength from inner mind. It seemed that some budget would be allocated for the establishment of Thailand Volunteer Promotion Center. In some countries like Germany, the volunteer work is a compulsory activity of the curriculum as it specifies that the high-school students before entering into the university or higher level must accumulate some volunteer work hours. The volunteer work may not be the welfare project, but other social activities.

"Suppose that we study how to rescue the drowning people. If such studying aims at developing the child's spirit, it will teach the child to know why we must know it, why we can help other people. But, our teaching and learning system is different. We study to pass the exam only." (Vilasinee Adulyanon, 2013)

The school system does not coach us to know ourselves, and to comprehend others, but it is a competitive or vertical system. Good learning must widen the intellectual space, not the vertical power succeeding. Education must allow learners to use the talent and it should be the vertical education. The learning must be shared together. Senior learners must learn with new small children. The teachers do not perform the duty of teaching, but coaching while the children create and design their own playing. This approach roots the vertical relationship. But, the children must stay in a community, learn the community problems, and even help it prepare the plan to solve the coastal erosion there because what the children learn is the fact and they must use their genuine talent, etc.

Positive Youth Development is originated in the United States according to the Bioecological Theories of Human Development of Urie Bronfenbrenner with an aim at developing the full competency in youths. Some studies reveal that the more the adolescents have positive power, the fewer they have emotional and behavioral problems and the better they feel to themselves. The Search Institute constructed 40 developmental assets indicators as the development guideline. It was found that more developmental assets were correlated with less risk behavior, either aggression, use of alcohol and substance, and immature sexual intercourse, and violation of law. In contrast, more development assets led to more positive behavior such as studying success, strong physical body, and spirit to help others.

In Thailand, Dr. Suriyadeo Tripathi et al. in collaboration with Dekplus, ThaiHealth provided the Life Assets Inventory and Life Assets Reinforcement Approach as a guideline of Thai children and youth care and development. These are based on the concept of positive power or predisposing factor, which is a good attribute in children and youth to prevent them from problems, make their potential development perfect. This concept is the basis for the development of tangible and precise indicators. The assessment results can be applied to tailor the child and youth development in each community as well.

Life Assets are the predisposing factors for both cognitive development and positive mindfulness to the children themselves and their environment, which include the family, educational institute, wisdom, local culture, community, Dharma sources, and peer, which are the social immunity for tackling various problems and risk situations (Suriyadeo Tripathi, 2008).

Tackling the problems or risk situations along with developing child and youth's potential must rely on 2 crucial parts: cognitive development, and positive mindfulness. Both components provoke the consequent positive behavior.

Cognitive skills and positive mindfulness to self lead to the power of self (I am)

Cognitive skills and positive mindfulness to the community and environment one lives lead to the power of society (I have), which consists of 4 minor powers: power of family, power of intelligence, power of community, power of peer and activity.

From acquiring the good immunity from good life assets, one would be able to tackle various problems and obstacles until he acquires his potential (I can) based on good cognitive skills and positive mindfulness for himself and his society.

Life Assets Positive Development Approach

The development of Life Assets Inventory and Life Assets Reinforcement Approach was originated in 2006 by Dr. Suriyadeo Tripathi et al. in the name of Dekplus as supported by Thai Health Promotion Foundation (ThaiHealth) and many other organizations. This approach is based on 3 main concepts in order to reinforce life assets through constructive activities in the family, school/educational institute and community so that Thai children and youth could engage the cognitive development and positive mindfulness.

The first 2 concepts **arouse the positive mindfulness,** *and the other arouses the systematic working and participation, analytical thinking, development, reinforcement, actions, assessment, and lesson-learnt.*

Figure 1 and 2: Illustrations of life assets concept

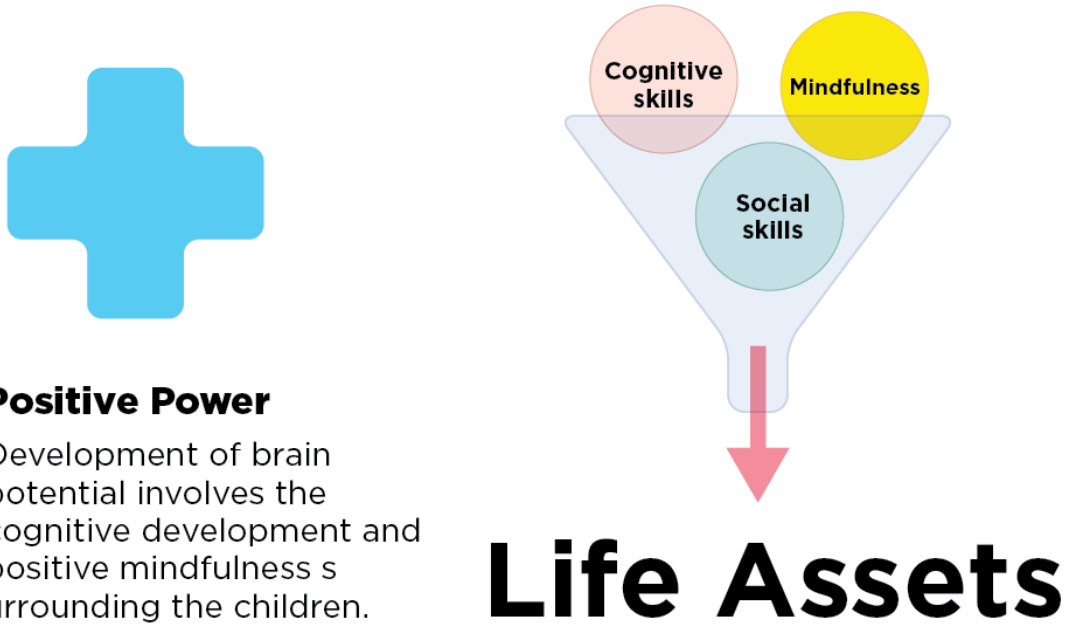


Figure 1 shows an integration of cognitive development and positive mindfulness into the life assets, which are tangible measures for the positive power.

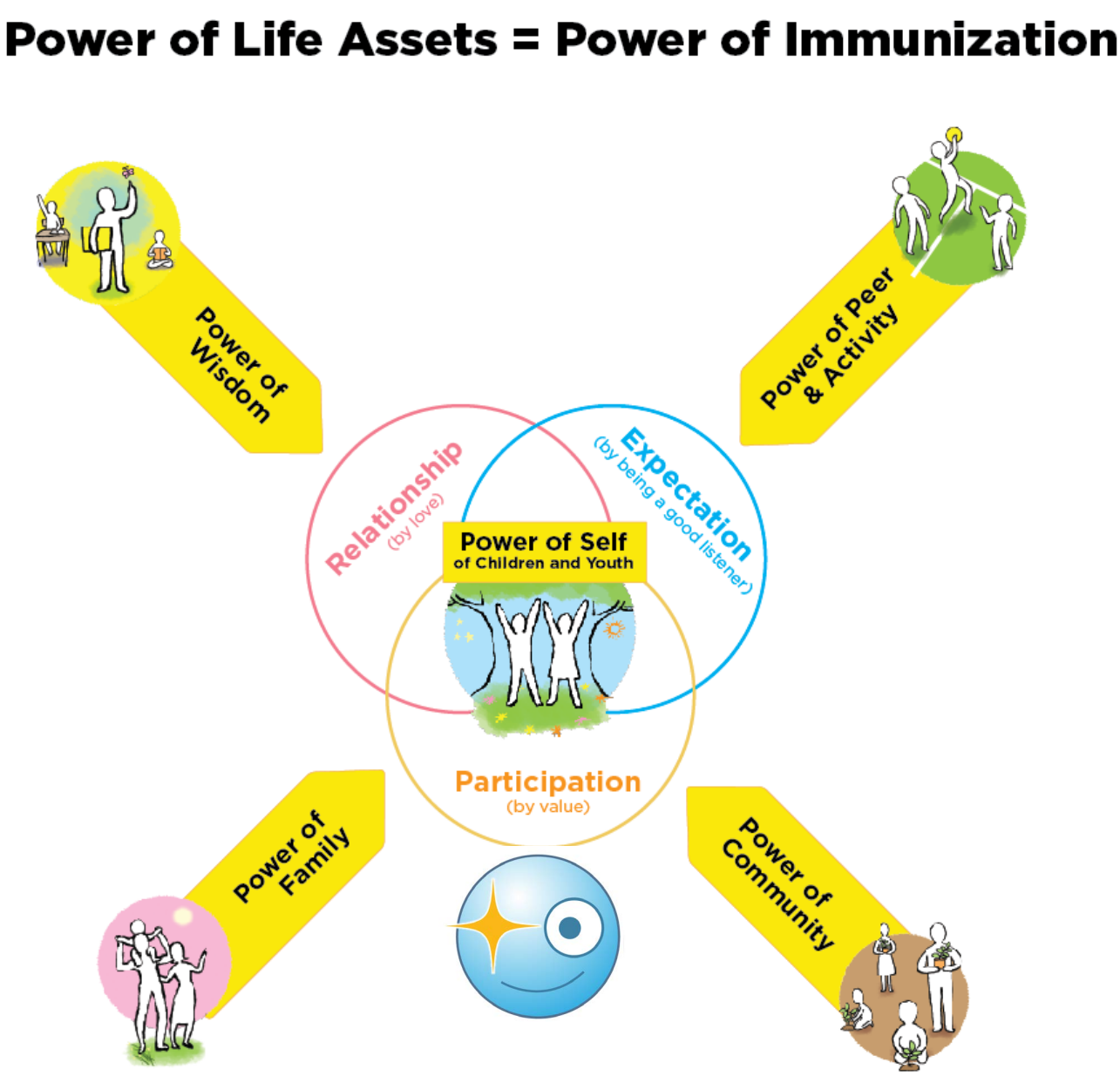


Figure 2 shows 5 powers of life assets. The power of self is at the center, surrounded by another 4 powers focusing on reinforcing the social immunity while mainly adhering to the concept of positive power, expressed opinions, and participation of children and youth.

The three main concepts are as follows:

Concept 1: Change your thinking; your life changes by positive power

Either life assets inventory or approach is the compilation of enabling factors and development factors. They are the positive-power tools and positive-power approach for analyzing 5 contexts (self, family, intelligence, peer and activity, and community) in order to enhance the positive indicators based on lifestyle and culture of each country.

Concept 2: Both life assets inventory and approach listen to child and youth's opinions

by their self-assessment, which would provoke the positive mindfulness, and the data processing results could point out any weak conscious mind or power subject to the child and youth's feeling.

Note: Concept 1 and 2 are mainly the development for conscious mind.

Concept 3: Life assets tool, which involves 5 powers, and life assets approach relying on the team-based working.

There are 3 stepladders for the development of management skills and living in the society under a good system and participation.

Life assets (power of immunization) consist of 5 powers:

1. Power of self – This is an integration of the power of self, comprising self-esteem, self-trust, self-confidence, and life skills together.

2. Power of family – This is a power of love, warmth, care, house safety, discipline, good living model, and helping with each other.

3. Power of wisdom – This is a power of intention to add the intelligence, to be supported and promoted to have both formal and non-formal learning process, as well as local wisdom.

4. Power of peer and activity – This is a power of doing activities with peers, which are useful for the society, and root the discipline among peers, e.g. exercising, extracurricular recreation activities.

5. Power of community – This is a power of people living together with sympathy, understanding, amicability, discipline and good modeling, public mind, safety, and joint activities.

"Life Assets of Thai children and youth" include all ages of children, either early-childhood, school-age or teenage. Both life assets inventory and approach have been developed.

The life assets measurement criteria are as follows:

Level of Life Assets	Percentage of Answering each item (% of scores)	Analysis Results
Level of life assets is quite low and it should be added or reinforced.	Lower than 60.00 (Grade F)	Not passing criteria
Level of life assets is moderate and life assets should be more reinforced.	In the range of 60-69.99 (Grade C)	Passing criteria
Level of life assets is good.	In the range of 70-79.99 (Grade B)	Passing criteria
Level of life assets is so good.	Higher than 80.00 (Grade A)	Passing criteria

Source: Dr. Suriyadeo Tripathi and Dekplus Team, User Guide on Life Assets Inventory for Thai Children and Youth (youth version), 2010

Note: The above measurement criteria may be the indicator for a particular item or the whole description of that power.

Life Assets for work development at the micro system, meso system, and macro system

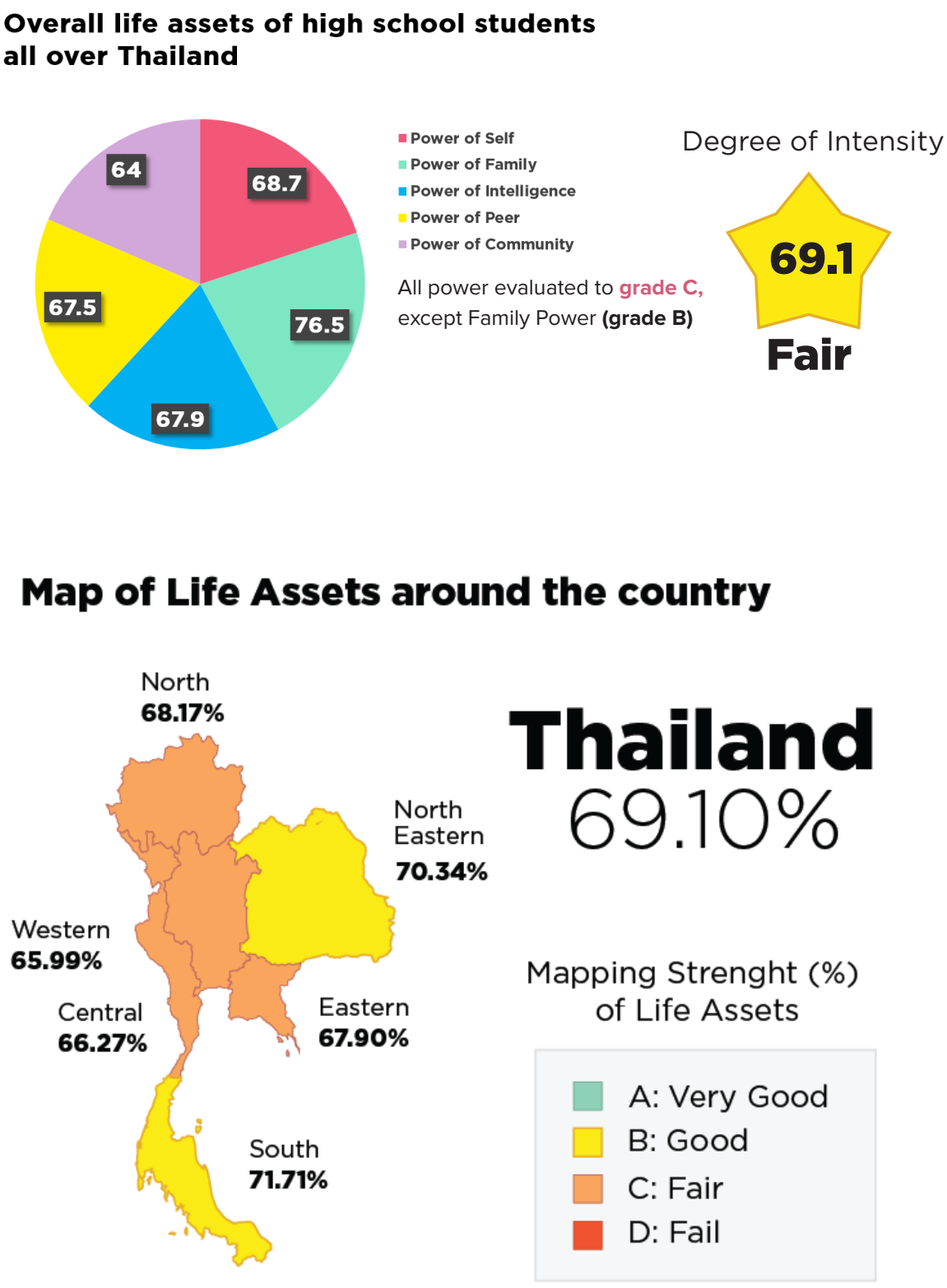
A. Use of life assets reinforcement approach at the micro system.

The direct survey for life assets of child and youth leads to the potential development based on any weak life assets and indicators. The surveys at various levels are presented below.

Results of life assets surveys in many groups of youths

In 2008 and 2010, the life assets of high-school students across the country were surveyed in cooperation with Ramajitti Institute and the Ministry of Education (Figure 3). The survey results are as follows: The overall life assets survey result from listening to opinions given by children and youths at every region of the country was at the fair level (C+). Among those 5 powers, the power of family was at the best rank or at the fair level (B).

Figure 3 and **4**: **Overall life assets survey result from listening to opinions given by children and youth at every region of the country**



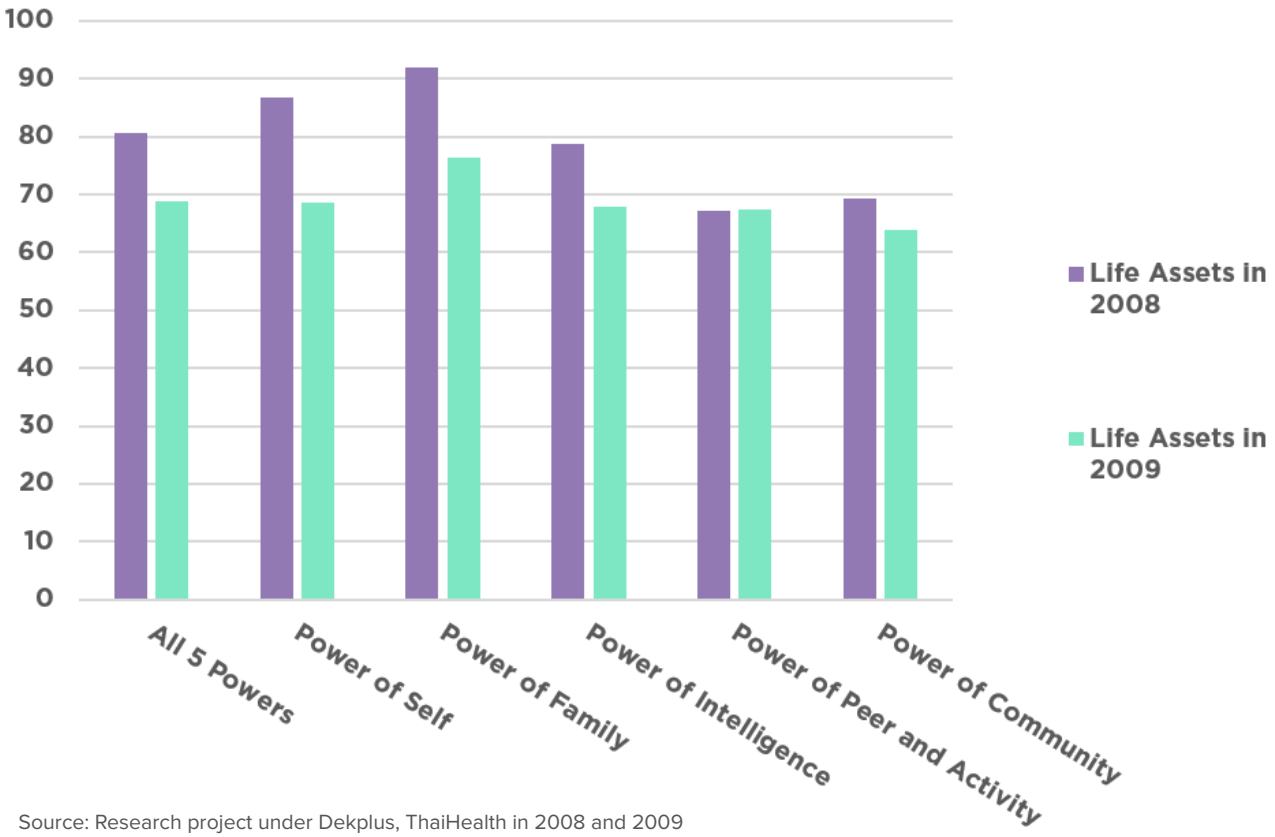
Acknowledge ; Office of Basic education,Ministry of Education, Thailand 2012

Table 2: Comparison of life assets survey results in Thai youth in 2008 and 2009

	All 5 powers	Power of Self	Power of Family	Power of Wisdom	Power of Peer and Activity	Power of Community
Life assets in **2008**	80.75	86.71	92.08	78.77	67.10	69.40
Life assets in **2009**	68.90	68.70	76.50	67.90	67.50	64.00

Source: Life Assets of Thai Youth Report. Dekplus, ThaiHealth in collaboration with the Child Watch Project of Ramajitti Institute surveyed the life assets of Thai youth aged between 12-18 years studying in educational institutes in 2008 in the total of 20,892 students, and also the life assets of 12,200 Thai students aged between 14-18 years studying at the secondary school level in the educational year of 2009 in schools under the supervision of the Office of the Basic Education Commission (OBEC).

Graph 1: Report on general situation of life assets in Thai youth across the country



Source: Research project under Dekplus, ThaiHealth in 2008 and 2009

From the national surveys for two consecutive years, the life assets of Thai youths have been declining, either the overall power, power of self, power of family, power of intelligence, or power of community, except the power of peer and activity with a slight increase of scores. The power of community was the weakest power from those two surveys. This indicates the weak relationship between youths and community. It is obvious that most life assets with low scores related to the power of community, that is, the children and youths have not yet involved in doing constructive activities in their community. Doing public activities with the community, in fact, cultivates the adolescents to love their homeland, have bond with the community, and build the public mind and responsibility.

For religious activities, some foreign researches showed that the public mind activities or religious activities in various communities were a positive power preventing the adolescents from any risk behavior such as alcohol drinking and use of substance, staying away from school. These activities were also correlated with better academic achievements, and chance of further studies at the university level.

Although the power of family was the strongest power in such 2-year surveys, its strongest scores have decreased most if compared with other powers. This indicates the importance of family to the youths. In their views, the family is an important source of power. But, if compared with the current family situation when the social unit has been weaker, the family structure has been gradually changing from the expanded family to be the nucleus family in the midst of cold family relationship, higher divorce rate, and living by adhering to the material success until the family affection decreased, it is so worrying that if these situations are not remedied, the youths' life assets would be largely affected because they valued the power of family most.

Moreover, it was found that the lowest scores of life assets fell into the power of intelligence regarding seeing through the media. In the present world, the technological advances vary the media channels; so they may be controlled difficultly. The youths may access into harmful or useful media easily and conveniently. As the adolescents spend most of time with the media, the negative contents released by the media may cause them to have aggression, immature sexual intercourse, unhappiness in physical appearance, risk to the eating disorder, and risk to smoking and alcohol. Therefore, the adolescents must have the analytical skills to receive the useful media only. If they are also advised by adults, they will have the learning process until they see through the media to prevent undesirable outcome from the media.

Comparative study on life assets between youths in remand homes and general youths in schools in order to draw up the preventive guideline on substance use by the cooperation of Dekplus, ThaiHealth, and the Office of the Narcotics Control Board (ONCB)

This is the comparative study on life assets of children and youths aged 14-18 years between those staying in the normal educational system and those detained in any authorities working for the rehabilitation of narcotic addicts with offences relating to the use of substance in 2009, which involved 6,250 new samples who were punished. These samples stayed in every part of the country, namely, Bangkok and vicinity, central, northern, northeastern, and southern parts. The top five lowest life assets ranked are as follows:

Table 3: Top five lowest life assets ranked by samples in schools and samples in remand homes

Top five lowest life assets ranked by samples in schools	Top five lowest life assets ranked by samples in remand homes
1. I have regularly done the community activities every week. (34.52%)	1. I have regularly done the community activities every week. (33.39%)
2. I have participated in voluntary activities held in the community every week. (35.92%)	2. I have participated in voluntary activities held in the community every week. (37.39%)
3. I have participated in religious activities every week. (52.05%)	3. I have been assigned to perform duties valuable and useful for the community. (44.74%)
4. I have been assigned to perform duties valuable and useful for the community. (55.36%)	4. I adhere to good behaviors (for example, avoiding the immature sexual intercourse, tobacco, liquor, narcotics, and violence) (45.74%)
5. I do homework or review my lessons every day. (65.04)	5. I do homework or review my lessons every day. (47.46%)

Source: The study project for the development of life assets survey tool for youths in order to formulate the guideline on immunity against substance use, 2009

It was found that both groups of children and youths had weak life assets in part of the power of community as they had no participation in community activities. This finding was consistent with the study on life assets of youths around the country in 2008 and 2009 that the power of community was the weakest, especially voluntary activities, participation with community activities, and participation with religious activities. Therefore, it is necessary that the campaign for public mind activities must be made broadly. Also, there should be the campaign helping each community have more activity space for its children and youths.

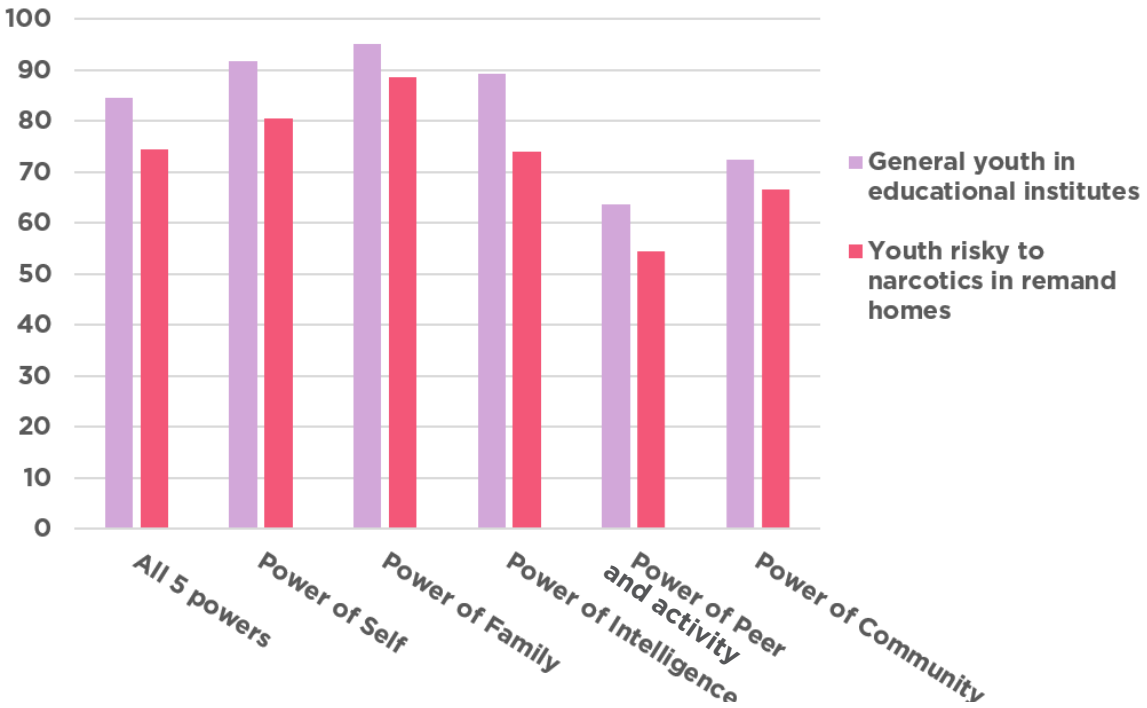
The youths staying in remand homes, definitely, had lower life assets than those staying in the normal educational system, either total scores or scores of each power as presented in Table 4.

Table 4: Comparison of life assets in Thai youths between general youths in educational institutes and youths risky to substance use in remand homes

	All 5 powers	Power of Self	Power of Family	Power of Wisdom	Power of Peer and Activity	Power of Community
General youths in educational institutes	84.56	91.68	95.06	89.26	63.56	72.50
Youths risky to narcotics in remand homes	74.52	80.53	88.64	73.99	54.37	66.58

Source: The study project for the development of life assets survey tool for youths in order to formulate the guideline on immunity against substance use, 2009

Graph 2: The study project for the development of life assets survey tool for youths in order to formulate the guideline on immunity against substance use: comparative data on life assets between general youths in educational institutes and youths risky to substance use in remand homes



Source: The study project for the development of life assets survey tool for youths in order to formulate the guideline on immunity against substance, 2009

Table 4 and Graph 2 show clearly that, from the previous belief that the teenagers were addicted to friends and they should feel good with friends, the result shows that both sample groups felt good with the power of family rather than the power of peer and activity, especially the power of peer and activity for youths staying in remand homes was less than 60%, that is, this power did not reach the criteria.

This may be concluded that every life asset of youths staying in remand homes was lower than those in educational institutes. Therefore, to help the youths experiencing narcotic problems, the power of intelligence must be added with a focus on professions such as Phra Dabos project or jobs corps in the United States. The power of self may be added by doing some public mind activities in the community to enhance self-esteem. In addition, these risky youths must practice some life skills through the power of family under the participatory learning process project between children, youths and family (parents-child classroom). The power of community must be also used as a good model for these youths. The power of peer and activity must build good-model youths in order to enlarge the positive power among Thai youths.

Life Assets Project for Minor Children by Dekplus, ThaiHealth, and the National Council for Child and Youth Development under the Royal Patronage of HRH Princess Maha Chakri Sirindhorn (NCYD) together with another 7 network organizations, including the Pattaya Orphanage, Foundation for Child Development, The Center for the Protection of Children's Rights Foundation, Holt Sahathai Foundation, Bangkok Y.M.C.A. Foundation, Foundation for Children with Disability, and the Planned Parenthood Association of Thailand

From surveying life assets in 7 groups of difficult children, comprising neglected youths, youths with legal problems, right-violated youths, disabled youths, poor youths, youths affected by AIDs, and youths in crisis, the results are in Table 5.

Table 5: **Comparison of life assets survey results in Thai youths between general youths and another 7 groups of children with some difficulties**

	General youths	Neglected youths	Right-violated youths	Youths with legal problems	Disabled youths	Poor youths	Youths affected by AIDs	Youths in crisis
All 5 powers	80.75	82.18	76.06	75.93	73.84	80.29	82.58	78.31
Power of Self	86.71	87.20	81.71	83.10	85.67	86.09	83.87	85.35
Power of Family	92.08	87.14	83.54	84.70	86.14	88.91	92	90.54
Power of Wisdom	78.77	82.22	79.60	74.81	63.51	84.31	89.33	74.27
Power of Peer and Activity	67.10	66.67	57.10	56.30	45.83	62.48	70	60.12
Power of Community	69.40	80.00	69.13	70.78	73.55	70.71	73.75	72.6

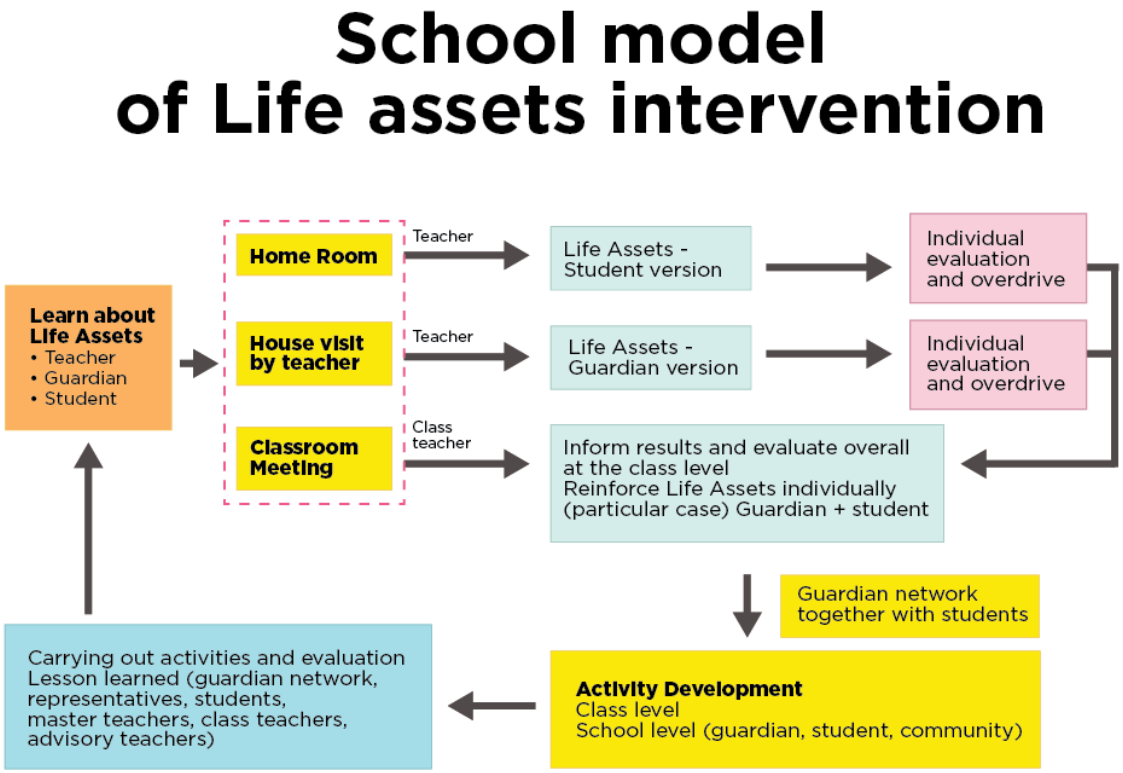
Source: Research project under Dekplus, ThaiHealth, Year 2009 and 2010

Table 5: Data on life assets for minor youths surveyed by the National Council for Child and Youth Development under the Royal Patronage of HRH Princess Maha Chakri Sirindhorn (NCYD) in 2009-2010 shows that, among 7 difficult groups, the disabled youths had the lowest life assets. It is obvious that the power of peer and activity was so low that it did not pass the criteria in 3 youth groups, namely, right-violated youths, youths with legal problems, and disabled youths. Naturally, these groups have already had some limitations or obstacles in reinforcing their life assets through the power of peer and activity.

It was also found that every group of vulnerable youths lacked the life assets regarding the power of community, especially in taking roles valuable and useful for the community, and doing volunteer activities. In addition, these youths had no power of peer and activity, especially doing good activities for the community or friends. Importantly, the vulnerable youths had better public mind than the normal children.

B. Use of life assets reinforcement approach at the mesosystem

Figure 5: A. Use of life assets reinforcement approach at the mesosystem



Source: Dr. Suriyadeo Tripathi and Dekplus team, Life Asses Positive Development, 2013

Figure 5 – Every school can develop the life assets reinforcement approach in its school system by integrating it with the student care system, which has already existed in each school, through using tools and doing activities systematically; namely, (1) knowing life assets in homeroom activities, teacher house-visit activities, and classroom meeting; (2) taking the life assets inventory to survey the children, youth, and parents; (3) processing the life assets data by individual student and/or individual class; (4) jointly analyzing and developing constructive activities; and (5) carrying out creative activities and lesson-learnt to share and summarize the learning together. Each activity stage must provoke the participation between children and adults, feeling of ownership, talks to share opinions in order to learn, accept, and enhance the activities appropriate for stronger life assets.

Life assets reinforcement approach enables some changes and working based on the positive thinking to seek for the students' value/potential for better development. This approach also provokes certain constructive activities relevant to the child's needs, the participation between school, family, and community. It is also an important part for opening the school fence to the family and surrounding community so that the child and youth become stronger.

C. Use of life assets reinforcement approach at the macro system

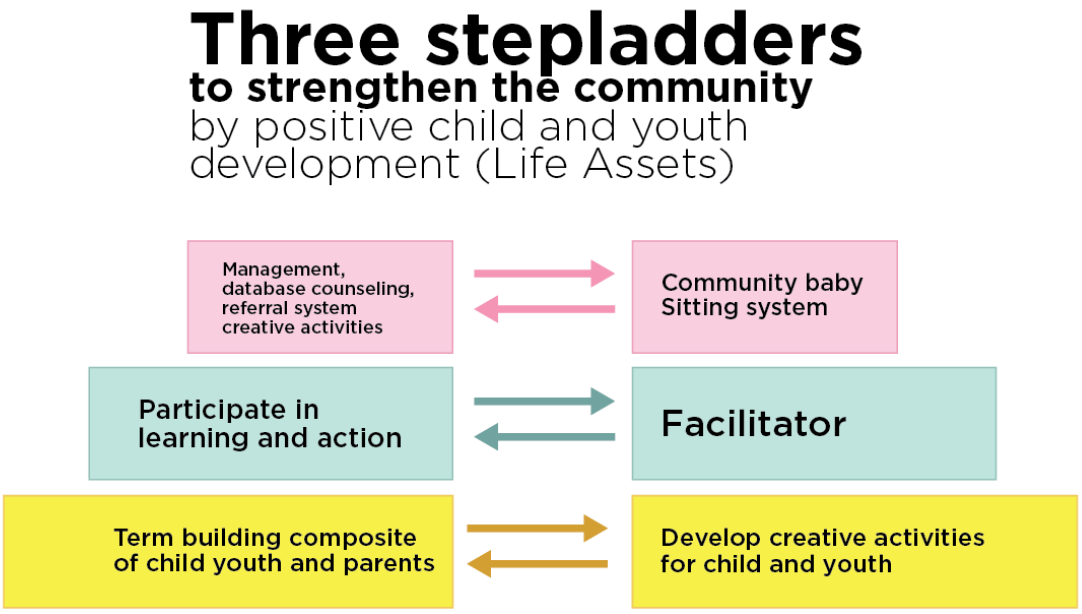
Strong Community...Essential Immunity
A community takes a very important role in developing the youths' life assets under 3 following steps:

1. Formation of community constructive activities by using some activities to reinforce life assets of youths. The working team consists of the children, youths, and adults in the community so that those activities are designed to respond to the community youths' actual needs.

2. Construction of lesson-learnt process from activities and knowledge sharing between workers by relying on the facilitator.

3. Community baby-sitting system in order to manage the community knowledge base, to weave the network, and to coordinate with many related agencies.

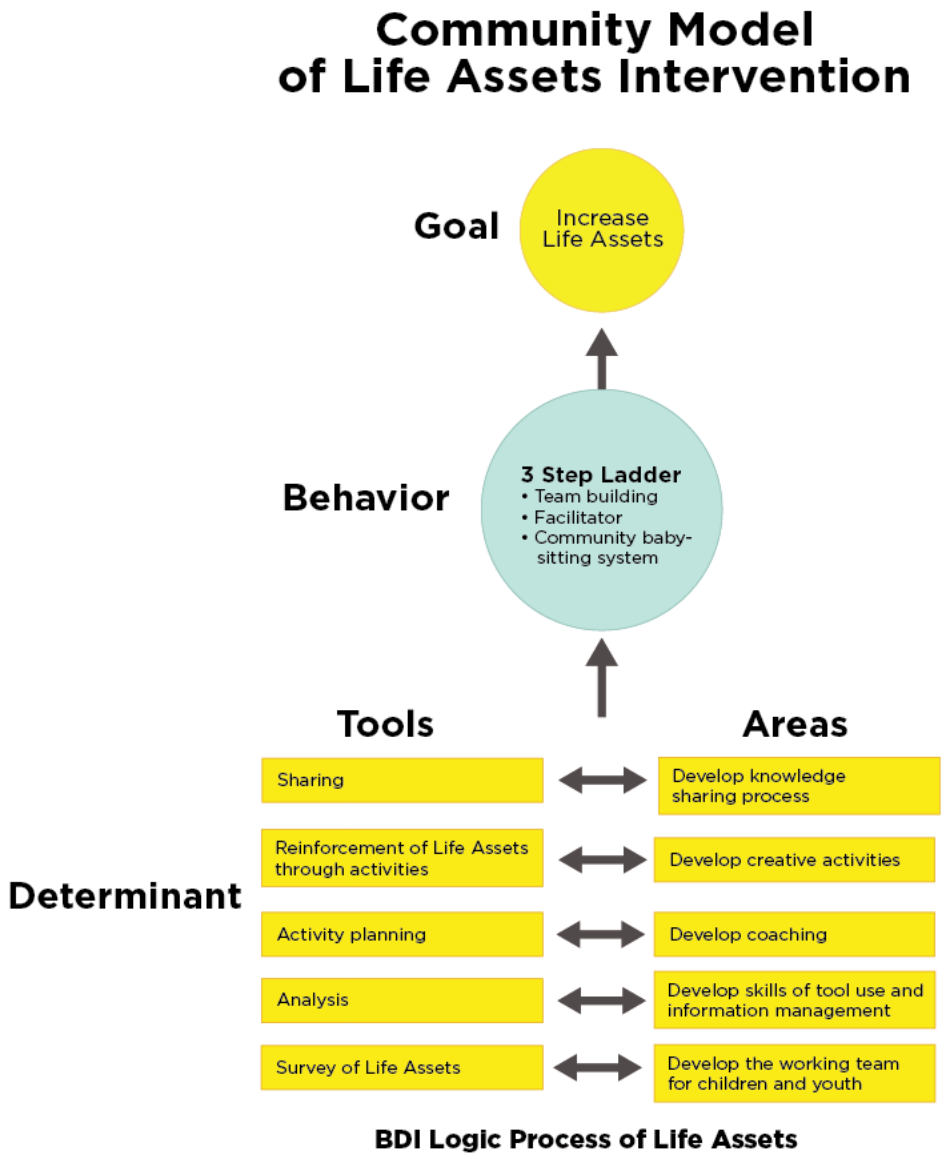
Figure 6: **Three stepladders to strengthen the community by positive child and youth development (Life Assets)**



Source: Dr. Suriyadeo Tripathi and Dekplus team, Life Asses Positive Development, 2013

Figure 6 starts from developing the child and youth working team to the lesson-learnt process from all activities and every member voice, community coaching/counseling system for child and youth as well as other community members until the community acquires the management system with counseling skills, watching, and transfer effectively.

Figure 7: Community Model of Life Assets Intervention



Source: Dr. Suriyadeo Tripathi and Dekplus team, Life Asses Positive Development, 2013

Figure 7 – A community had the life assets development based on the above model. The life assets survey tool for child and youth deems the first tool arousing the blending of child and youth in the area. This model is undertaken by adults who have concerns that the social circumstances would make the children weak and spend their life improperly.

- Life assets survey tool inspires the community adults to consider and talk as they want to see that the community children are developed and cared systematically in the midst of social problems and declining culture.
- Data collection of life assets inventory results to the team-working comprising children and adults, the design for

survey collection, allocation the working teams in the area, solving confronting problems, and jerking children and parents by positive questions. The survey results will be analyzed to plan for the activity development.

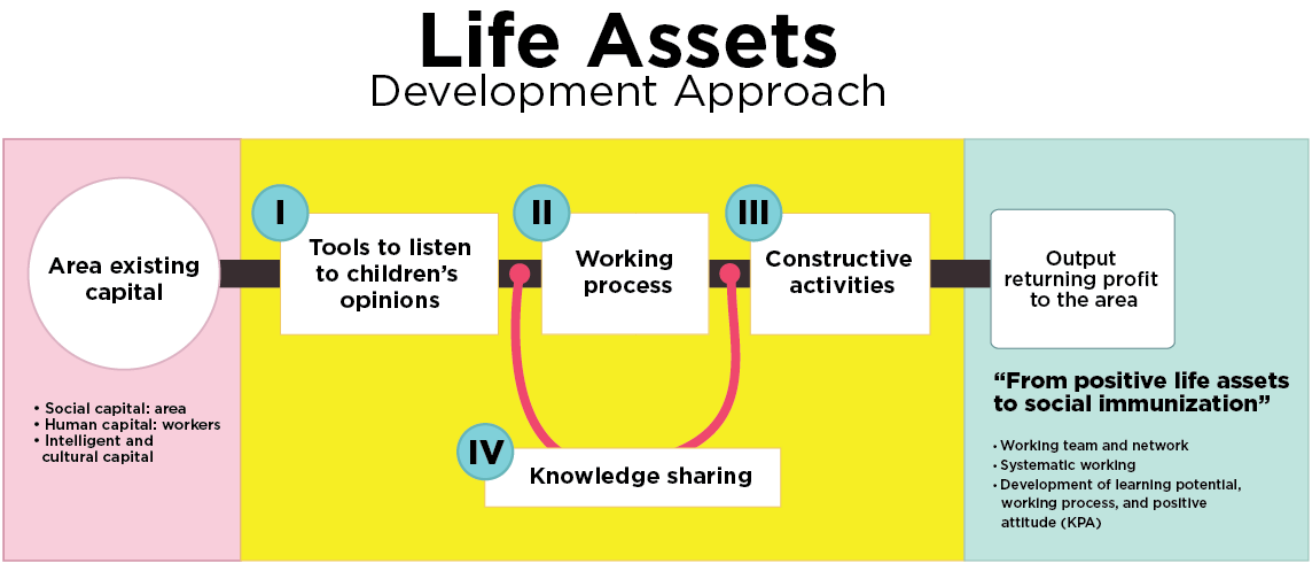
- Development of constructive activities is the event coached and advised by adults who do not dictate and instruct, but it results from the analysis of weak life assets, which would be strengthened by certain creative activities. The activity arrangement would be jointly created; children are the practitioners while the adults are the counselors or mentors.

- Establishment of working team involving community adults and youth leaders. The adult leaders take the role of mentor or advisor to the youths of that community/local area. These mentors/advisors have duties of promoting and encouraging the development for creating the constructive activities for these children, and of providing some advice on activities appropriate and relevant to the area context and each group of youths.

- Promoting the planning for doing activities, managing the activity plan, solving on-going problems, and summarizing the lessons from those activities in order to improve and develop the working team and activities in arranging such constructive activities.

- Having diverse activities, and developing the activity level regularly subject to the changing ages

Figure 8: **From positive life assets to social immunization**



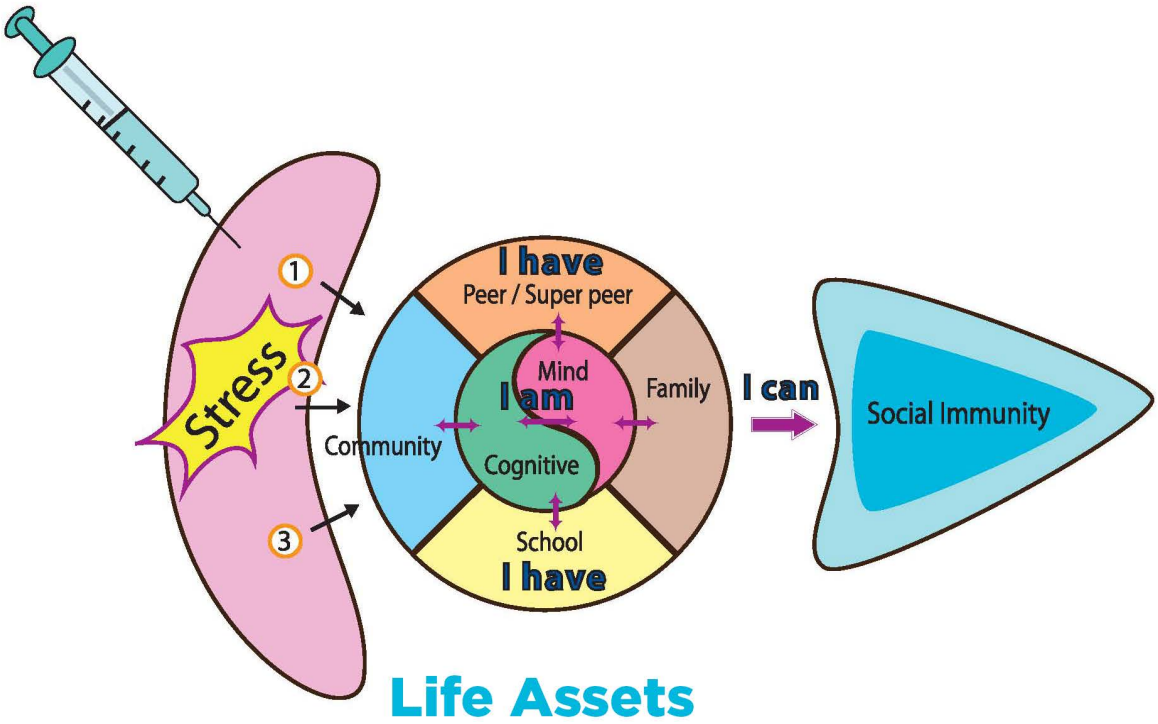
Source: Dr. Suriyadeo Tripathi et al. Report on Life Assets Activities to Reinforcement of Cultural Context, 2011 under support and collaboration with The Cultural Surveillance Bureau, Office of the Minister, Ministry of Culture

Figure 8 – Life assets reinforcement approach is the positive life assets for the social immunization", which must involve the area existing capital, comprising social capital, human capital, and intelligent and cultural capital, that are ready to step into the life assets development approach by using some tools initiating the participation, systematic and effective process, and constructive activities resulted by the joint consideration and operating process until it becomes the output returning profit to the society, i.e. strong team, effective working system, and KPA" The development of knowledge, working process, and positive attitude lead to the "immunity" for further child, youth, family, community, and social development.

From path of life assets reinforcement approach to the potential development...life immunization

Every child and youth has competency, but how much such potential is drawn out depends on the promotion and practice by adults and society surrounding these children. The child and youth's potential development is also up to their personal attributes (I am), life skills (I have), and abilities in fighting against and tackling the problems constructively (I can). Such knowledge together with some research results mentioned above could be applied to be the 3-step social driving guideline in line with the youth's life assets level. This guideline is based on a principle that if passing the difficult exercises in life,

Figure 9: Emergence of resiliency in child and youth through life assets



Source: Dr. Suriyadeo Tripathi. Resiliency in Child and Youth. Fuel the Super Power for Child and Youth by I am/ I have/ I can." Potential Development of Thai Child and youth to ASEAN Economic Community, 2013

the youths can practice the skills necessary for solving their life problems, and practice the strength of mind. This is to use the actual life problems to draw out their hidden potential.

1. Youths acquiring high life assets will be able to tackle the problems by themselves, and to apply the difficulties they confront to be stronger. The adults have duties of watching, arousing the children to have the cognitive development, allowing them to solve any problems by themselves, and giving some help if necessary.

2. Youths acquiring moderate life assets. The degree of hindrance or difficulties in life must be adjusted to match the youths' abilities or problem-solving skills, that is, the degree of difficulties should not be so easy that the youths make no attempts or do not practice any new problem-solving skills. In the meantime, the degree of difficulties should not be too hard that the youths feel stressed, discouraged, and give up finally. The degree of difficulties should be placed from easy to difficult or from simple to complicate. The adults, either in the family, school, or community, must take a role of change agent by opening the issues and arousing the youths to acquire the cognitive process, and guiding them to draw out their hidden potential.

3. Youths with low life assets. Any injured life assets of these youths must be repaired first by using the predisposing factors by creating self-confidence, being stirred by the family, school, and community. These youths should not be left to confront the problems immediately because they have not yet had enough power, skills or potential to pass the problems. Such obstacle may deplete the little power they have quickly until they have the inferiority, feel useless, discouraged and despairing.

The three benefits of life assets when the power of self (I am) and the power of surroundings (I have) occur.

- If the assessment result in any area or community exceeds 80%, the child potential can be improved by allowing them to consider and do anything by themselves while the adults just keep a close watch on them.

- If the assessment result in any area or community is in the range of 60-80% or fair and moderate level, the child potential (I can) can be improved by using some constructive activities under close care and advice by adults. "The children create and undertake by the adults' support. The adults gradually move back from dominating the youths' ideas, and the youths can do anything by themselves finally.

- If the assessment result is less than the criteria (<60%), the children's life assets must be reinforced by community adults, and be given love, warmth and trust before allowing them to confront the problems and hindrance from simple to difficult activities until these children gain the development eventually.

Policy Advocacy

The life assets concept and life assets reinforcement approach are the important processes for the development of child and youth affairs. They should be driven distinctly by all related agencies and organizations. The policy on these matters

should be implemented as follows:

1. There should be the child and youth development plan, which is expected that it derives from the participation of all related parties. The plan will look like the operating master plan. Apart from the national plan, the local plans must be formulated as well. The local administrative organizations and communities must be involved to set up their plan direction to be in line with such national plan. However, a local plan must rely on each community's budget.

2. There should be the plan implementation report to be submitted to the Council of Ministers and the Parliament.

3. There should be the National Child and Youth Development Assembly like the Health Assembly to perform 2 main duties: 1) to analyze the child situation on a yearly basis; and 2) to monitor the work performance.

4. Life assets are stated in the National Child and Youth Development Plan, and they deem the assessment indicators as specified in the National Child and Youth Development Plan, Year 2012-2016. The child and youth authorities should build up the coaching system to develop the personnel to act as the community mentors, to build up the communities acquiring the potential in guiding or advising the children and youths there, and to develop the positive power through government and private agencies for the sustainable problem-solutions.

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