Adolescent Health; Situation and Strategy

Dr. Suriyadeo Tripathi MD.*

*Adolescent section, Queen Sirikit National Institute of Child Health
Bangkok Thailand

**ABSTRACT**; Health status of adolescents and young adults has been the subject of growing concern among clinicians, researchers, policy makers and advocates interested in youth issues and adolescent health. Poor health outcomes caused by health-damaging behaviors include such categories as substance abuse, sexual behavior, reduced school performance, risky driving, violent behavior, and juvenile delinquency. Thai youths 10-19 years old is about 8 million, every year 62,000 (70 per thousand) become parents and 60,000 are HIV infected and this become the second leading cause of death in Thai youth (20% of total death in youth, while the first leading is motor-vehicle crashes). Adolescent Health in Thailand with Triangular theory of powerful network on three basis structure as knowledge-based, community-based and policy-based and five levels of connectedness and collaboration with three E: Education, Empowerment and Environment, will produce an improvement in the health status of adolescents soon.

If it goes wrong for today’s adolescents, it goes wrong for the world. Adolescence as young people age 10 to 19 account for one fifth of the population in the world (1). This population represent a unique period in the life cycle, bringing with it special challenges and opportunities. The risky behaviors include such categories as substance abuse, sexual behavior, reduced school performance, risky driving, violent behavior, and juvenile delinquency (1,2).

Thailand has 70 million of population and around ten percent of them is young people less than 19 years old (3). According to the Year 2003 National Health survey, nuclear families are growing up with 10% of families are single parents (mostly female) and 30% of them live without parents (3). Most leading causes of death are preventable. Forty percent of all deaths among youths and young adults are caused by motor vehicle crashes. With 4,000 teens are killed in Motor vehicle crashes. Frequent high-risk driving behavior makes motor vehicle crashes the first leading cause of death in youths between the ages of 15 and 19 years (3,4).
According to sexual development in Thailand, the first sexual initiation mean age become earlier (mean age in 2003 is 16 years old) while the first marriage mean age become more older (mean age in 2003 is 24 years old). Most young people enter puberty in early adolescence—around age 10 for women and age 12 for men (3). They typically have sexual intercourse for the first time around age 16, but do not marry until their middle to late twenties (3). This gap period means that they are at high risk of unintended pregnancy and sexually transmitted for almost a decade before marriage.

Adolescent sexuality is very sensitive and confidential issue for every youths and young adults in Thailand. With limitation of resources in sexual education, contraception method and condom usage, adolescents are facing potential problems. Youth in Thailand gain knowledge and experience in sexuality by media and their friends at first and only a few of parents have skill in this area(3,4). In every setting, sexual activity begins during adolescence among many young people. Much of this activity is risky and contraceptive use is often erratic. Unwanted pregnancy and unsafe abortions are observed in many settings. Sexual relations may be forced. There are wide gender-based differences in sexual conduct, and in the ability to negotiate sexual activity and contraceptive use. Despite this, relatively few young people think they are at risk of disease or unwanted pregnancy. Awareness of safe sex practices seems to be superficial, and misinformation regarding the risks and consequences of unsafe sex is widespread. Most sexual activities in youth are in risk-behavior without protection. With strong cultural and religious communities, contraception and condom are limited in use (23% of sexual active youths) (3,4).

As total around 8 million of Thai youths 10-19 years old, every year 62,000 (70 per thousand) become parents and 60,000 are HIV infected and this become the second leading cause of death in Thai youth (20% of total death in youth). While the first leading in this age group is motor vehicle crashes and become handicap nearly ten thousand per year. Six hundred of youth commit suicide in the year 2003. One third of sexual transmitted diseases are youth between 15 to 19 years old (3,4). The results of infection include chronic infection, acute symptoms and serious delay effects such as infertility, ectopic pregnancy, cervical cancer and untimely infant and adult death. Presence of the other sexual transmitted infection is a person greatly increases the risk of acquiring or transmitting the human immunodeficiency virus (HIV) (5).

In the United State of America, rate of C. trachomatis infection for women are highest for adolescents (2,536/100,000 among women aged 15–19 years) and young adults (2,447/100,000 among women aged 20–24 years) (5,6,7). A study of adolescents who were initially HPV negative found that 55% acquired HPV within three years. In a study of college-enrolled women who were HPV negative, and reported never having sexual intercourse at enrollment, approximately 30% acquired HPV within 12 months after initiating intercourse and more than 50% became HPV positive within four years. These numbers underscore the ease of sexual transmission of HPV in adolescent and young adult women (8,9,10).
As well as internet-games addiction in Thai youth is also mostly 10-15 years old youth. They spend time more than 20 hours per week or about 3-5 hours a day and expense more than 2,500 baht per month (4). While Substance abuse in Adolescents is 6.2 % of total young population (4), the two most important gateway for the other kind of drug use and deviant behavior are smoking and alcohol. Youth less than 20 years old male drink about 2 million (around 20% of total youth age 15-19 years old) while female is about two hundred thousand (around 2%of total youth age 15-19 years old). Most smokers and drinkers start during their teens and the median age of initiation is less than twenties (3,4).

According to all of these crisis events in Thai young population, become the strong reason for set up the strategy for adolescent health. There is increasingly well known in Thailand an approach structure called “Triangle that Moves the Mountain” (11). The Mountain means a big and very difficult problem, usually unmovable. The Triangle consists of: Creation of relevant knowledge through research, Social movement or social learning and Political involvement. With Triangular theory of Powerful network on three basis structure as knowledge-based (K), community-based(C) and policy-based (P) by Professor Dr. Prawase Wasi (11) and five levels of connectedness and collaboration with three E: Education(E1), Empowerment(E2) and Environment(E3) will produce a significant improvement in the health status of adolescents(12). This Triangular network is structured as three circles. The first circle is led by knowledge-based organization with every experts for preparing all health care providers in Thailand, set adolescent health curriculum, researches, review literatures, policy statements, consultant and services in hospitals. The second circles is leaded by communities-based organizations such as parent – teachers association, friends corners and many Non government organizations mass media that work hard for set up family TV programs and activities. The Third circle is leaded policy-based organization work closely with the government for making policy nationwide and other supports. All of these circles will be working together to be a powerful network as their outstanding career or job description as illustrated in figure 1and 2.Moreover, the strategy of Adolescent health net work is categorized in five levels as health care provider, individual, family, community and country level and each level has their specific detail of strategy by structure (three E) education, environment and empowerment and risk subject with public health challenges as illustrated in table 1 and 2.
Figure 1. The Triangular theory for powerful network; presented by Professor Dr. Prawase Wasi. With three basis structure as knowledge-based, community-based and Policy-based are working together to strengthen the network and make more power to deal with nationwide youth problems.

Figure 2. Adolescent health network Thailand; model by Dr. Suriyadeo Tripathi. With multidimensional level as individual, Family, Community, Country and regional international level and each level is structured by education, environment and empowerment. Every levels have their connection and collaboration with each other.
<table>
<thead>
<tr>
<th>Level</th>
<th>Strategy</th>
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| 1. Health provider | training health provider (curriculum)  
|               | improve knowledge and information (Research)  
|               | coordination and support for health services  
|               | ready available for appropriate services  
|               | inter and intra-professional level collaboration  
|               | legal right to health care and confidentiality  |
| 2. Individual level | easy to access information and counseling  
|               | expand and support activities and programs  
|               | assure confidentiality care  
|               | teen advocacy  
|               | peer group (friend corner)  
|               | provide and support media  
|               | create opportunities and support street or homeless youth in adolescent health and activities.  |
| 3. Family level | provide education to parents of adolescents  
|               | easy to access information and counselling  
|               | expand and support activities and programs  
|               | promote family resources centers  
|               | provide and support media  
|               | support parental network  |
| 4. Community level | Promote training to school and working group of community  
|               | Create a supportive environment for promoting adolescent health  
|               | Community-level collaboration  |
| 5. country level | Provide policies for education, research  
|               | Provide Media Policies  
|               | Government-level collaboration  
|               | International collaboration  |
Table 2. Subject/Topic and Public Health Challenge (12,13,14)

<table>
<thead>
<tr>
<th>Physical Activity</th>
<th>Promote regular physical activity / family activities/decrease time spend for internet game on computer and TV</th>
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<tbody>
<tr>
<td>Eating Behavior</td>
<td>Promote healthier weight and good nutrition</td>
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<tr>
<td>Tobacco Use</td>
<td>Prevent and reduce tobacco use</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>Prevent and reduce substance abuse.</td>
</tr>
<tr>
<td>Sexual Behavior</td>
<td>Promote abstinence or reduce sexual activity and contraception including condom /advocacy STI Screening in sexually active Adolescent</td>
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<tr>
<td>Mental Health</td>
<td>Promote mental health and well-being</td>
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<tr>
<td>Injury and Violence</td>
<td>Promote safety and reduce violence</td>
</tr>
<tr>
<td>Environmental Quality</td>
<td>Promote healthy environments</td>
</tr>
<tr>
<td>Immunization</td>
<td>Prevent infectious disease through immunization</td>
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<tr>
<td>Access to Health Care</td>
<td>Increase access to quality health care</td>
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Summary

Adolescence is a period of hope and optimism when they grow in confidence to adulthood. But it is also a time when unsuspected dangers and confusing messages dash hopes. Every young person needs an effective strategy to survive and flourish during a period when young people experiment with adult behavior. Without it, many are at risk from unprotected sex, and from the dangers of alcohol, tobacco or other substances. Adolescents are also at risk from violence, including sexual violence. The effective strategy for prevention and promotion health will be a good immunity for them to be an effective adult.

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References


