Rapid Assessment and Response: The Context of HIV/AIDS and Adolescents in Bangkok *

Nantiya Watthayu, Jennifer Wenzel, Ratree Sirisreetreeru, Chayathit Sangprasert, Nuntiga Wisettanakorn

Abstract:
Purpose: The purpose of this study was to implement and evaluate the Rapid Assessment and Response (RAR) method of assessing HIV/AIDS risk-taking behaviors among adolescents in Thailand.

Design: This community-based participatory research was designed in partnership with a community working group (CWG) consisting of local leaders, public health and social services providers.

Methods: Findings described here are derived from a larger study in which data were collected using five methods: focus groups, cultural expert interviews, mapping, observation, and surveys. Only findings from the survey, developed for this study, are reported here. The survey comprised: demographic data (16 items); HIV/AIDS knowledge (5 items), beliefs and values regarding HIV/AIDS and condom use (17 items); perceived risk (2 items); and HIV/AIDS risk-taking behaviors (22 items).

Main findings: The survey was administered to 100 adolescents aged 12 - 22 years. Findings revealed that adolescents are at an elevated risk of early, unprotected sex. Observed high risk behaviors included: unsafe sex, sex exchanges (for example, for drugs and money), substance abuse, and drug-dealing. There were also strong links between alcohol consumption and unprotected sexual encounters. Due to the observed lack of HIV/AIDS knowledge among adolescents, communities expressed a need for school-based or community-based prevention programs. Survey results were presented to the CWG to develop targeted action plans and research-based recommendations.

Conclusion and recommendations: RAR appears to be an effective assessment tool to develop population-specific HIV/AIDS prevention interventions. The findings of this study provide information that could enable local health providers and policy makers in developing and implementing community-specific interventions to reduce the spread of HIV/AIDS among young people.

Keywords: rapid assessment and response, community-based participatory research, adolescents, HIV/AIDS, risk-taking behaviors

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Introduction

HIV/AIDS is still a major public health problem throughout the world, including Thailand where the mode of transmission is changing from homosexual and intravenous drug users to include heterosexual behavior, affecting more diverse populations than those infected two decades ago. In Thailand, women, children, and adolescents are increasingly infected with HIV/AIDS. Although several strategies for solving this problem have been established by government and non-government organizations, the number of HIV-infected cases continues to increase. In addition, social and economic conditions are rapidly changing in Thailand creating situations where adolescents are increasingly vulnerable to HIV/AIDS infection. It is critical that efforts to prevent HIV/AIDS continue to be targeted toward persons of all age groups at risk, and increased efforts should be directed toward adolescents.

Factors that have contributed to this increased vulnerability may include the adoption of more westernized behaviors, the presence of major trafficking routes for both drugs and sex, and inadequate HIV/AIDS prevention programs in both schools and communities. Adolescents living in poverty and/or from broken homes are especially at risk. Moreover, many young people are still being drawn into the sex trafficking trade as workers or clients. The shift toward increased concealment as indirect sex workers accounts for substantial portions of the sex trade industry and is also projected to facilitate new waves of HIV transmission.

According to the Ministry of Public Health (MOPH), the estimated 10,853 newly reported HIV infections for citizens between the ages of 15 and 24 accounted for 40% of the total number of new infections. Moreover, data from the AIDS control division of the Ministry of Public Health, the behavior surveillance survey showed a disturbing rise in the proportion of male students who are sexually active (24.7%) along with 51.5% consistent rates of condom use. Young Thai women have also been documented as more likely to engage in premarital sexual relationships than earlier generations. Female students claimed they were sexually active (13.9%); these data, coupled with only a 47.6% consistent rate of condom use has direct implications for HIV/AIDS spread, thus posing a public health threat.

Bangkok is a modernized city and the capital of Thailand. According to Health Department of Bangkok Metropolis Administration, cumulative HIV/AIDS cases in 2010 were 41,938. Of these, 9,356 deaths were reported. Among reported AIDS cases, there was a high proportion of 20-34 year olds, indicating HIV infection 5-10 years earlier. As with many modern capital cities, Bangkok is a center of entertainment where young people have easy access to entertainment facilities. An attraction to and adoption of Western culture may provide behavioral cues for youth to participate in higher levels of sexual and drug activity resulting in a higher risk of HIV infection. Moreover, amphetamines and other drug use among young people have been linked to unsafe sex practices.

HIV/AIDS is endemic, so it is critical to find ways in which to effectively fight this disease locally. According to UNDP, strategies are more likely to yield success if they are tailored to local pattern of the epidemic, thereby increasing the likelihood of response to changes in those patterns. Therefore, programs that match the diversity of risk behaviors among groups of young people in different areas of the country are sorely needed. According to UNAIDS (2010), strategic information on HIV/AIDS and young people must be collected and analyzed in order to inform and improve program planning and implementation for young people. Although, there some data on HIV/AIDS prevalence existing in Thailand, the quality of these data is limited and may be insufficient for targeted program development. Specifically, there is a lack of quantitative and qualitative data on risk behaviors and practices needed to better understand unique risk behaviors, attitudes and values, HIV/AIDS prevention, and care needs for adolescents. To address this knowledge gap, a Rapid Assessment, Response, and Evaluation (RARE) strategy was applied to gain insights into local needs to aid in the design of interventions matched to patterns of HIV risk within communities. In 1988, RARE was developed by the World Health Organization (WHO) as an approach for undertaking a comprehensive assessment of public health issues and behaviors within a short time period. RARE provides a scientific structure and process to collect and evaluate evidence, set priorities, and develop practical, effective interventions to change HIV/AIDS risk behaviors.
Purpose:
The purpose of this study was to utilize the Rapid Assessment and Response (RAR) method of assessing HIV/AIDS risk-taking behaviors among adolescents. An evaluation of whether knowledge gained through RAR facilitated identification of local needs and development of appropriate actions to prevent/reduce adolescents HIV/AIDS risk in Bangkok metropolis was also conducted.

Methodology

Design
This study was a community-based participatory study designed in partnership between academic (Faculty of Nursing, Mahidol University) and communities located in the catchment area of Health Center 26.

Community Work Group (CWG) Selection:
Engaging the community is an essential component of RAR; thus, recruiting an expanded CWG was one of the first steps of the process. Individuals were invited to join the CWG based on relationships within the community including community planning, political leadership, and educational involvement. The CWG consisted of local community leaders, public health and social services providers as well as key professionals (e.g. doctor, social worker, policeman, school teacher, public health nurses, community health volunteers, community development officers). The CWG provided excellent assistance during the project, guiding the site selection to address “hot spots” of high-risk activity based on their previous knowledge of areas with high sexual risk activity and drug activity.

Sample

Target population and Setting
After discussion with the CWG, the working group decided to implement the RAR project focusing on adolescents in 3 communities within the catchment area of Health Center 26. The rationale for the target areas and population was due to the prior experiences of the CWG in addressing high sexual risk activity and drug activity in these areas.

Sampling technique and Sample size
For the survey portion of the assessment, convenience sampling was used. Inclusion criteria were: adolescents age 12 to 22; living in the communities within the Health Center 26 catchment area of Bangkok; willingness to share perspectives and experiences about the topic; and willing to provide voluntary informed consent. Adolescent were recruited by personal contact from local community leaders. A total of 100 participants were included in this study.

Data Collection

Field Team Member Recruitment and Training: The Field Team was composed of males and females from the communities who were selected to lead the data collection process. A three-day training session included background information on the RARE, discussion of the HIV/AIDS situation, data collection methods, data recording and analysis, and awareness of issues relating to confidentiality and anonymity.

Data for the rapid assessment were collected through multiple methods and data sources in order to triangulate findings for cross-checking and validating the results. Mapping and observational methods obtained in the rapid assessment were used to identify locations where adolescents at high-risk congregated and engaged in potentially risky drug and sexual activities.

Study instruments
The survey developed for this study was comprised of demographic data (16 items); HIV/AIDS knowledge (5 items), beliefs and values regarding HIV/AIDS and condom use (17 items); perceived risk (2 items); and HIV/AIDS risk-taking behaviors (22 items). Questions were developed by the researchers based on literature reviews and their expertise with the topic. The questionnaire was reviewed for content validity by a panel of experts consisting of HIV/AIDS specialist, community health nurse, and adolescent health. Prior to utilizing the questionnaire, it was pilot-tested with 30 adolescents in another similar community to establish face validity of the instrument and reliability. After pilot testing, some changes were made to improve issues such as readability. The reliability of the beliefs and values scale was acceptable, yielding a Cronbach’s alpha of 0.85.

Data analysis
Data were entered into a database and analyzed using the Statistical Package for social Sciences (SPSS)
version 17. Quantitative data analysis was used to analyze the survey. Descriptive statistics were employed to describe participant characteristics and examine HIV/AIDS knowledge, beliefs and values regarding HIV/AIDS and condom use, perceived risk, and HIV/AIDS risk-taking behaviors.

Ethical considerations
Data were collected after approval from Mahidol University Institutional Review Board. Adolescents and parents were contacted through a community leader in their community. All adolescents who agreed to participate received an information summary before an informed consent form was signed. Parental consent was also sought; adolescents aged less than 18 years provided assent and obtained written informed consent from parent for survey participation. Participation was voluntary, and participants could withdraw at any time and could refuse to answer any questions. Adolescents were ensured that the information would be strictly confidential.

Results
The survey was administered to 100 adolescents from 3 communities in this rapid assessment. A summary of descriptive data based on quantitative survey questions is provided in Table 1. The majority of adolescents were female (65%) and the mean age was 15.4 (range: 12 - 21). Most (72%) resided with their parent(s) at the time of data collection.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>35 (35.0%)</td>
</tr>
<tr>
<td>Female</td>
<td>65 (65.0%)</td>
</tr>
<tr>
<td>Age (mean = 15.4, range = 12-21)</td>
<td></td>
</tr>
<tr>
<td>12-14</td>
<td>42 (42.0%)</td>
</tr>
<tr>
<td>15-17</td>
<td>35 (35.0%)</td>
</tr>
<tr>
<td>≥ 18</td>
<td>23 (23.0%)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Elementary school</td>
<td>17 (17.0%)</td>
</tr>
<tr>
<td>Primary school</td>
<td>42 (42.0%)</td>
</tr>
<tr>
<td>High school</td>
<td>16 (16.0%)</td>
</tr>
<tr>
<td>Vocational school</td>
<td>25 (25.0%)</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
</tr>
<tr>
<td>Buddhism</td>
<td>63 (63.0%)</td>
</tr>
<tr>
<td>Islam</td>
<td>37 (37.0%)</td>
</tr>
<tr>
<td>Parents’ marital status</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>76 (77.6%)</td>
</tr>
<tr>
<td>Widowed</td>
<td>2 (2.0%)</td>
</tr>
<tr>
<td>Separated</td>
<td>20 (20.4%)</td>
</tr>
<tr>
<td>Father’s job</td>
<td></td>
</tr>
<tr>
<td>Blue collar worker</td>
<td>53 (54.6%)</td>
</tr>
<tr>
<td>Merchant</td>
<td>24 (24.7%)</td>
</tr>
<tr>
<td>Government officer</td>
<td>9 (9.3%)</td>
</tr>
<tr>
<td>Government entrepreneur</td>
<td>5 (5.2%)</td>
</tr>
<tr>
<td>Other</td>
<td>6 (6.2%)</td>
</tr>
<tr>
<td>Mother’s job</td>
<td></td>
</tr>
<tr>
<td>Housewife</td>
<td>31 (31.3%)</td>
</tr>
<tr>
<td>Worker</td>
<td>32 (32.3%)</td>
</tr>
<tr>
<td>Merchant</td>
<td>29 (29.3%)</td>
</tr>
<tr>
<td>Government officer</td>
<td>3 (3.0%)</td>
</tr>
<tr>
<td>Government entrepreneur</td>
<td>2 (2.0%)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (2.0%)</td>
</tr>
</tbody>
</table>
HIV/AIDS awareness

Findings revealed that more than one-third (40%) of participants did not perceive themselves to be at risk for contracting HIV/AIDS. Most (58%) believed that only sex workers could transmit HIV/AIDS and that sexual relationships with partners were safe. Moreover, almost half (49%) admitted that having sexual relationships at an early age: 14-16 years was common.

HIV/AIDS related Knowledge and HIV/AIDS prevention program

All groups of participants confirmed the limited existence of HIV/AIDS education prevention programs in their communities. Adolescents stated that most information about HIV/AIDS had been received from friends or at school. Survey questions relating to knowledge about HIV/AIDS transmission revealed that more than half of the adolescent participants knew about methods of HIV/AIDS transmission and its prevention, but also held misconceptions of specific aspects of transmission such as touching, sharing drinking vessels, using the bathroom, and that contact with saliva could transmit the disease. The participants expressed a desire to learn more about HIV/AIDS and how to protect themselves from viral transmission. Some revealed that they had learned about HIV/AIDS from a health education class provided at school by teachers, but they were unable to recall the information provided.

HIV/AIDS risk-taking behaviors

Substance abuse: Eighteen (18%) of adolescents had used drugs. The mean age at first drug use was 14.9 years. Type of drugs most commonly used included alcohol, tobacco, marijuana, and amphetamines. None reported injection drug use. Seven adolescents (38.9%) who had taken drugs indicated that they usually used drugs at home; others reported use within a bar/café/club (22.2%) and on the street (16.7%). Seven adolescents (41.2%) used two or more drugs concomitantly.

Sexual behaviors: Seventeen (17%) had sexual intercourse with a reported mean age of 15.7 for first sexual intercourse (range: 14-20 years). Of those who had sexual intercourse, more than half (52.9%) had one sexual partner in the past year, and 35.3% had between 2 and 5 partners. Only one person had more than 10 partners. Among sexually active adolescents, all reported sexual intercourse within a relationship. Moreover, among those groups, more than one-thirds (35.3%) reported that they also had sexual intercourse with someone they had just met. Most reported having sexual intercourse due to a desire to experiment (35%) or as a result of peer pressure (32%). More than one-third (35%) had 64.7% “sometime” or never” used condom during sex. The main reason that they did not use condoms was reported as trust in the partner (56.3%), not liking to have sex with a condom (18.8%), or feeling ashamed to request use of a condom (12.5%). Two participants (11.8%) reported having sex in return for money or drugs. Among sexually active adolescents, one reported having a known sexual transmitted disease. More than half (58.8%) who had sex reported using drugs or alcohol before having unsafe sex, and 27% had been viewing pornography. Surprisingly, adolescents admitted that they had sex within his/her family home.

Discussion and recommendation for action

The RAR appears to be an effective public health tool in linking the rapid assessment (approximately within 6 months) to the responses. Using multiple methods to explore HIV/AIDS risky behaviors produced immediate contextual information to inform the development of a community-specific action plan. RAR findings were presented to the CWG for planning the response targeting the adolescents. Findings revealed that adolescents in these communities are at elevated risk of drug activities and early unprotected sex. Among adolescent risk behaviors observed, unsafe sex, substance abuse, trading drugs in the communities, and sex exchanges (for drugs or money for example) were identified. Findings also pointed to strong links between drug use and alcohol consumption and unprotected sexual encounters. According to the International Council on Management of Population Programme, in their report on improving access for young people to education and services for sexual and reproductive health, HIV, and Gender in Thailand, Thai young people view sex as a normal encounter, with initial sexual encounters occurring as early as 14.5 years of age. The authors of this report also indicated that the changing sexual environment among young people has increased the indirect sex worker trade. For example, young girls in schools or universities are changing casual sex for monetary return or disposable goods, such as fashion brand-name items, mobile phone, and i-pods.
Although, Thailand is recognized as one of the most successful countries in reducing HIV/AIDS infection and has invested considerable resources to increase awareness and education in the past two decades, adolescents surveyed in this study were not well-informed regarding HIV/AIDS, probably due to changes in social norms. Thai adolescents may now be more likely to engage in sexual encounters at earlier ages. The current situation may reflect changes in existing health policy where a focus on HIV/AIDS prevention has been displaced by a focus on treatment and care of HIV/AIDS infection. According to the UNAIDS, the Thai government funds only 14% of the national HIV budget for HIV prevention. However, enhancing HIV/AIDS knowledge and risk-reducing skills continues to be important, as adolescents in this study were to engage in high-risk behaviors: sexual intercourse at earlier age: 14-16 years, sex with new partners, with multiple partners, without using condoms, or while under the influence of drugs or alcohol.

As determined in the results of the larger study, effective interventions must be prioritized by feasibility within communities where resources are limited. In this study, due to a lack of HIV/AIDS knowledge among adolescent, the communities expressed a need for developing and/or enhancing HIV/AIDS education programs including either school-based or community-based prevention programs. Further, the need to develop or enhance HIV/AIDS education programs to be specific to the needs of the target populations was identified in this study. Additional planned interventions need to be responsive to the specific context of adolescents’ lives while addressing known gaps between HIV knowledge and practice, perceived risk and beliefs as well as societal norm and values. Anonymous voluntary counseling/testing within youth-friendly environments also needs to become available. Increased accessibility to condoms by centrally accessible vending machines providing affordable or free access in a private setting may also be an effective public health strategy. However, it would be controversial in Thai society and a challenge. Moreover, the use of local media in relation to HIV/AIDS education could be an effective method to tackle common and persistent misconceptions related to HIV/AIDS transmission.

This RAR study also had several common limitations, namely the likely effects of a selection bias in the data collection. In addition, data were obtained through self-report. Data addressing sensitive behaviors such drug use and sexual practice could be affected by factors such as a social desirability bias.

### Conclusion
To adequately control the current HIV/AIDS epidemic, a better understanding of adolescent experiences within the context of local communities is crucial to develop and implement effective prevention programs appropriately matched to local patterns of HIV/AIDS risk-taking behaviors. RAR appears to be an effective assessment tool to develop population-specific HIV/AIDS prevention interventions, but it is recognized that the survey needs to be utilized in more studies to better determine its reliability and validity. The findings of this study provided information that enabled local health providers and policymakers regarding HIV/AIDS issues within the community. Similar applications of RAR can help to reduce the spread of HIV/AIDS among young people within and outside Thailand.

### Acknowledgements
The authors would like to acknowledge the experience, commitment, and expertise of our CWG and their essential role in successfully completing the RAR tasks. We would also like to thank all of the adolescents and adult study participants who generously contributed their time and experiences to contribute to this study. The authors would also like to express appreciation to the expertise of Drs. Supinda Reanunjiratsteian, Atitaya Pornchaikate, and Asso Prof. Chutima Chotipum in serving on the Expert Panel to review and validate the quantitative survey.

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การประเมินและการตอบสนองอย่างรวดเร็ว: บริบทของพฤติกรรมเสี่ยงต่อการติดเชื้อ HIV/AIDS ของวัยรุ่นในกรุงเทพมหานคร *

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บทคัดย่อ:
วัตถุประสงค์: เพื่อดำเนินการและประเมินผลของการนำวิธีการการประเมินและการตอบสนองอย่างรวดเร็วมาใช้ในการประเมินพฤติกรรมเสี่ยงต่อการติดเชื้อ HIV/AIDS ของวัยรุ่นในประเทศไทย
วิธีการดำเนินการวิจัย: การศึกษาครั้งนี้เป็นการวิจัยแบบการมีส่วนร่วมของชุมชนโดยความร่วมมือกับคณะทำงานชุมชน (CWG)ประกอบด้วยผู้นำท้องถิ่นและผู้ให้บริการสุขภาพและทางสังคม
ผลการศึกษา: การศึกษาเป็นส่วนหนึ่งของการศึกษาใหญ่ โดยการเก็บรวบรวมข้อมูล 5 วิธีได้แก่ การสนทนากลุ่ม การสังเกตการณ์ผู้เข้ารับบริการวัคซีน การทำแผนที่ การสังเกตและการสำรวจความคิดเห็นของคนทั่วไป ซึ่งจะรายงานผลการศึกษาที่ได้จากการสำรวจเท่านั้น
ผลการวิจัย: พฤติกรรมเสี่ยงต่อการติดเชื้อ HIV/AIDS ของวัยรุ่นจำนวน 100 คน มีอายุระหว่าง 12-22 ปี พบว่าวัยรุ่นมีความเสี่ยงสูงเพิ่มขึ้นจากการมีเพศสัมพันธ์ก่อนวัยอันตราย และมีเพศสัมพันธ์ที่ไม่มีการป้องกัน พฤติกรรมที่มีความเสี่ยงสูงได้แก่เพศสัมพันธ์ที่ไม่ปลอดภัย การมีเพศสัมพันธ์เพื่อแลกเปลี่ยนเช่นยาเสพติดและเงิน การใช้สารเสพติดและการดื่มแอลコฮอล์ นอกจากนี้พบว่าการเรียนรู้เรื่องต่อเติมปลอดภัยมีความเชื่อถือถูกต้องว่ามีเพศสัมพันธ์ที่ไม่มีการป้องกัน เนื่องจากขาดความรู้เกี่ยวกับ HIV/AIDS ของวัยรุ่น ชุมชนแสดงความต้องการที่จะรับโปรแกรมการป้องกัน ทั้งในโรงเรียนหรือในชุมชน ผลการสำรวจได้ถูกนำเสนอกลับคณะทำงานชุมชน (CWG) เพื่อดูแลแผนปฏิบัติการเป้าหมายและกำหนดข้อเสนอแนะที่ได้จากการวิจัย

สรุปและข้อเสนอแนะ: RAR เป็นเครื่องมือในการประเมินผลที่มีประสิทธิภาพในการพัฒนาระบบการบริการสุขภาพในชุมชน การป้องกัน HIV/AIDS จากการศึกษาให้ข้อมูลที่ชัดเจนให้บริการสุขภาพในท้องถิ่น และผู้กำหนดนโยบายในการพัฒนา และการดำเนินโครงการที่เฉพาะสำหรับชุมชนเพื่อลดการแพร่กระจายของเชื้อ HIV/AIDS ในพื้นที่ที่มี

คำสำคัญ: การประเมินผลและการตอบสนองอย่างรวดเร็ว ชุมชน วัยรุ่น HIV/AIDS พฤติกรรมเสี่ยง