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# Psychosocial needs of perinatally HIV-infected youths in Thailand: lessons learnt from instructive counseling<sup>†</sup>

B. Manaboriboon<sup>a</sup>, R. Lolekha<sup>b</sup>, K. Chokephaibulkit<sup>a</sup>, P. Leowsrisook<sup>c</sup>, T. Naiwatanakul<sup>b</sup>, J. Tarugsa<sup>a</sup>, Y. Durier<sup>a</sup>, N. Aunjit<sup>c</sup>, W. Punpanich Vandepitte<sup>c</sup>, and V. Boon-yasidhi<sup>a</sup>

<sup>a</sup>Department of Pediatrics, Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok, Thailand <sup>b</sup>Global AIDS Program (GAP) Thailand Asia Regional Office, Thailand MOPH – U.S. CDC Collaboration (TUC), Bangkok, Thailand <sup>c</sup>Division of Infectious Diseases, Ministry of Public Health, Queen Sirikit National Institute of Child Health (QSNICH), Bangkok, Thailand

### Abstract

Identifying psychosocial needs of perinatally HIV-infected (pHIV) youth is a key step in ensuring good mental health care. We report psychosocial needs of pHIV youth identified using the "Youth Counseling Needs Survey" (YCS) and during individual counseling (IC) sessions. pHIV youth receiving care at two tertiary-care hospitals in Bangkok or at an orphanage in Lopburi province were invited to participate IC sessions. The youths' psychosocial needs were assessed using instructive IC sessions in four main areas: general health, reproductive health, mood, and psychosocial concerns. Prior to the IC session youth were asked to complete the YCS in which their concerns in the four areas were investigated. Issues identified from the YCS and the IC sessions were compared. During October 2010–July 2011, 150 (68.2%) of 220 eligible youths participated in the IC sessions and completed the YCS. Median age was 14 (range 11-18) years and 92 (61.3%) were female. Mean duration of the IC sessions was 36.5 minutes. One-hundred and thirty (86.7%) youths reported having at least one psychosocial problem discovered by either the IC session or the YCS. The most common problems identified during the IC session were poor health attitude and self-care (48.0%), lack of life skills (44.0%), lack of communication skills (40.0%), poor antiretroviral (ARV) adherence (38.7%), and low self-value (34.7%). The most common problems identified by the YCS were lack of communication skills (21.3%), poor health attitude and self-care (14.0%), and poor ARV adherence (12.7%). Youth were less likely to report psychosocial problems in the YCS than in the IC session. Common psychosocial needs among HIV-infected youth were issues about life skills, communication skills, knowledge on self-care, ARV adherence, and self-value. YCS can identify pHIV youths' psychosocial needs but might underestimate issues. Regular IC sessions are useful to detect problems and provide opportunities for counseling.

Disclosure statement

<sup>&</sup>lt;sup>†</sup>The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the U.S. Centers for Disease Control and Prevention.

CONTACT: Boonying Manaboriboon boonying.man@mahidol.ac.th. Department of Pediatrics, Faculty of Medicine, Siriraj Hospital, Mahidol University, 2 Prannok, Siriraj District, Bangkok-Noi, Bangkok, Thailand.

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#### Keywords

HIV-infected youth; psychosocial needs; counseling; behavioral risks; instructive counseling; Thailand

#### Introduction

Effective antiretroviral therapy (ART) has increased the proportion of HIV-infected children surviving into adolescence (Chandwani et al., 2012; Garvie, Wilkins, & Young, 2010; Rongkavilit et al., 2007; UNAIDS, 2012). Adolescents face many challenges, including changes in body image, mindset and frequent peer pressure to engage risky behaviors. Adolescents with perinatally acquired HIV-infection (pHIV) face additional challenges during adolescence such as delayed growth and pubertal development, HIV-related health problems, and stigmatization (D'Angelo, Trexler, Fletcher, & Platky, 2003; Schneir, Wolfe, & Mackenzie, 1992). Studies have reported early onset of sexual intercourse, high rates of unsafe sexual practices, and illegal drug use among HIV-infected adolescents (Bauermeister, Elkington, Brackis-Cott, Dolezal, & Mellins, 2009; Brogly et al., 2007; Elkington, Bauermeister, Brackis-Cott, Dolezal, & Mellins, 2009; Ezeanolue, Wodi, Patel, Dieudonne, & Oleske, 2006; Wiener, Battles, & Wood, 2007). pHIV and behaviorally acquired HIVinfected adolescents may have differed in their risk behaviors profiles, but challenges with ART adherence, safe sexual practices, and life skills were common to both (Bauermeister et al., 2009; Brogly et al., 2007; Elkington et al., 2009; Ezeanolue et al., 2006; Murphy et al., 2001; Rongkavilit et al., 2007; Wiener et al., 2007). The majority of HIV-infected adolescents in Bangkok were knowledgeable about HIV transmission and the importance of antiretroviral (ARV) adherence; however, more than half lacked family planning, reproductive health, and knowledge about sexually transmitted infections (STI) (Lolekha et al., 2015).

We developed the Happy-Teen Program, a clinic-based intervention program implemented in routine clinical care, aiming to help HIV-infected adolescents who were aware of their HIV status to gain the knowledge and skills necessary for appropriate self-care, to ensure reproductive health, good ART adherence, and STI- risk reduction (Chokephaibulkit, Boon-yasidhi, Leawsrisook, Lolekha, & Nuchanard, 2012). In this report, we explored the psychological needs identified among HIV-infected youth during individual counseling (IC) sessions and a Youth Counseling Needs Survey (YCS) form. Defining the specific psychosocial needs of this population may help us identify appropriate intervention models for HIV-infected youth.

#### Methods

This study was a part of the Happy Teen Program that has been described elsewhere (Chokephaibulkit et al., 2015). HIV-infected adolescents aged 12-years-old followed at Siriraj Hospital or Queen Sirikit National Institute of Child Health (QSNICH) and those who had been cared for at a Dhamaraksa orphanage in Lopburi Province were invited to participate in the program at either Siriraj Hospital or QSNICH. The Happy Teen Program

activities included two group sessions and two IC sessions that focused on four healthrelated strategies (Figure 1).

All sessions were conducted during routine medical visits. Group sessions, mainly gamebased activities covering the four strategies, were run by healthcare providers who were trained to facilitate, guide discussion, and help participants understand the key messages related to the strategies (Chokephaibulkit et al., 2015). After each group session, an IC session focusing on the same strategies was conducted by counselors at the next clinic visit. Before the IC session, participants were asked to complete a YCS, a short self-administered questionnaire developed by a study working group, aiming to identify issues that participants would like to discuss. Prior to the study, the YCS was pilot tested among 10 pHIV youths at QSNICH and Siriraj Hospital to validate that the questions were understood by the youth. All counselors were experienced and well-trained in patient counseling. During IC sessions, the counselors began with an introductory conversation, provided confidentiality information, and then moved on to discuss the youths' concerns using the YCS to guide the discussion. Then, the counselors assessed participants' psychosocial issues using HEEADSSS assessment (Goldenring & Rosen, 2004; Woods & Neinstein, 2008), identify youths' strengths, and provided messages aiming to empower them. All problems detected were discussed and recorded in a semi-structured counseling form. Instructive guidance was provided according to the Happy Teen Program Manual (Chokephaibulkit et al., 2012). Referral to specialists was available if needed.

The study was approved by the Institutional Ethical Committees of the two participating hospitals: U.S. Centers for Disease Control and Prevention, and the Thailand Ministry of Public Health.

### Data analysis

Characteristics of participants were presented as proportions. Psychosocial problems identified by the YCS and the counseling form during the IC sessions were organized by main psychosocial issues. Data were analyzed and presented as proportions (percentages). Difference in proportion of psychosocial problems identified by YCS and the counseling form were compared by McNemar's chi-square test. Differences in proportion of psychosocial issues found during IC sessions by age group were compared by Pearson's chi-square test or Fisher's exact test where appropriate. All statistical testing was two tail with p < .05 considered statistically significant. All analyses were conducted using SPSS v. 16, Chicago, USA.

#### Results

From October 2010 to July 2011, 220 youths were eligible to participate in the Happy-Teen Program. Of these, 197 (89.6%) participated in at least one activity of the program and 150 (68.2%) participated in YCS and IC sessions. Participant characteristics are shown in Table 1.

Of the 150 participants, the median age was 14 (range 11–18) years, and 92 (61.3%) were female. The median (interquartile range) time spent in IC session was 36.5 (range 15–85)

minutes. Of the 150 participants, 138 had plasma viral load results. Proportion of participants who had VL <50 copies/mL increased from 103 (74.6%) at baseline to 114 (82.6%) one year after enrollment to the Happy Teen Program (p = .035) (Table 1).

A total of 130 (86.7%) youth reported having problems to discuss on the YCS or the IC session. This included 118 (78.7%) youths who reported having problems in the YCS and 122 (81.3%) in the IC session. Twelve (8.0%) youths reported no problems in the YCS, but were found to have problems during the IC session and 10 (6.7%) youths reported having problems in YCS had no issues detected by the counselors during the IC session (Table 2).

The most common problems found by counselors in IC sessions were related to issues of poor health attitudes and self-care (48.0%), lack of life skills (44.0%), poor communication skills (40.0%), problems with ART adherence (38.7%), and low self-value (34.7%). Youth reported fewer problems in the YCS than the IC sessions (Table 3).

The proportion of youth reporting problems did not differ by age. However, young adolescents tended to have more pubertal concerns than older youth, while those in middle and late adolescence tended to have more sexual risk behaviors (Table 4). All problems detected were discussed and guidance provided.

## Discussion

Contrary to our expectations that youth would report more concerns on the self-administered YCS, in fact, youth were more likely to discuss their concerns on self-care, ART adherence, sexual risks, and psychosocial issues with counselors. This finding may be due to a sense of trust established during the long-term relationships developed between participants and counselors in the study. In addition, confidentiality declaration was made at the beginning of each session (Woods & Neinstein, 2008). Consistent with other studies, we found some complicated psychosocial issues such as peer influences, family conflict, lacking of confidence to adopt safe sex practice (Henry-Reid, Wiener, & Garcia, 2007; Philbin et al., 2014; Wilson et al., 2001), sexual risk behaviors and other behavioral health risks in this population (Mellins et al., 2011). In the IC sessions, counselors were able to assess and prioritize problems and provide tailored-made management to each youth within half-anhour. Serious and harmful issues were managed urgently (e.g., adolescents who planned to run away from home or commit suicide, etc.). For other risky behaviors such as smoking or drinking alcohol, counselors would provide harm-reduction information and follow-up at the next clinic visit (Rosen & Neinstein, 2008; Woods & Neinstein, 2008). For health promotion, all youth and their families should be provided anticipatory guidance such as knowledge on adolescent development, drugs and their negative consequences, and sex education (American Academy of Pediatrics, 2008).

Information from the YCS and the IC sessions allowed healthcare providers to design appropriate interventions for youth based on their needs (Chokephaibulkit et al., 2015). Similar to other successful models, our program also encourages youth to share their leadership skills and play an active role in the service system (Huba & Melchior, 1998). The YCS, a self-administered questionnaire, used briefly before the IC session can help initiate conversations and sensitively probe for youth concerns. However, this study suggests IC sessions are important and may detect problems not elicited in the YCS and it can be implemented in routine service settings. The guidance and support from IC sessions may be able to improve ART adherence and prevent loss and psychosocial complications in youth (Agwu et al., 2015; Cervia, 2013).

This study had several limitations. The program was conducted in tertiary-care settings with experienced counselors who have long-established relationship with youth and their families. This might not be applicable to clinics with fewer resources. The majority of youth in the program were in young pHIV adolescents, and the concerns of older adolescents and behavior acquired HIV-infected adolescents may differ. Lastly, the small number of participants did not allow for comparisons psychosocial issues by age, risk factor or sex.

#### Conclusions

IC sessions should be implemented in the routine care of HIV-infected youth. The YCS is helpful to initiate conversations and to assess adolescent's self-awareness, but IC sessions are important to elicit adolescent concerns and address other important issues, including risk assessment and health promotion.

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## Appendix A

Youth Counseling Survey (YCS): HAPPY TEEN PROGRAM

These questions are used to explore your needs and feelings. Your answers will only be used for the purpose of counseling only, and will be kept confidential. Thinking about the past few months, please fill in the blanks below.

1. I have problems or concerns about:

Parents e.g.,
School e.g.,
Friends e.g.,
Boyfriends/Girlfriends e.g.,
Sex e.g.,
My health e.g.,
Medication taking e.g.,
Emotion e.g.,
Others e.g.

2. My caretakers often criticize me or don't understand:

_	
_	My disobedience e.g.,
	] My health e.g.,
	] My friends e.g.,
	Boyfriend/Girlfriend e.g.
	] Sex e.g.,
	Others e.g.,

3. I am proud or feel good about:

Home e.g.,
School e.g.,
Others e.g.,

4. Things I want to talk about today:

	Home/ Caretakers e.g.
$\Box$	School e.g.,
	My friends e.g.,
	Boyfriend/Girlfriend e.g.
	Others e.g.,

□ Siriraj □ QSNICH □ Dhammaraksa

#### Counselor Note for Individual Session

Session#Date	Time fromtoto.
Youth ID	
Client's name	ageyears old sex   male  female
Counselor's name	
Position	

	No risk identified Risk identified
2.	Risk Assessment by counselor
	No risk identified     Risk identified, as follow     General Health Care problems     AkV adherence
3.	Main issues discussed in this session
4.	Health care service provided
	Building rapport and explaining about counseling service Providing education/counseling in these issues
	□ Adjustment during puberty
	□ ARV adherence
	Self esteem/Stress management
	□ Sexual risk reduction
	Other risk taking behaviors
	Communication / Problem solving skill
	Referring to     Other service provided
5.	Counseling summary
	Complete information provided     Extra visit needed for
	Mart 6 Barrow while data

Risk Assessment from Youth Screening Checklist Form

1.

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#### The four main strategies for promoting self-care and reducing risk behaviors of HIVinfected youth and a diagram of Happy Teen Program activities.

Strategy	Description
<ol> <li>Health Knowledge</li> </ol>	Knowledge on HIV-positive adolescent health
2. Coping Skill	Self-esteem and stress management promotion
3. Sexual Risk Reduction	Education and counseling on sex education and sexual risk
<ol><li>Life Goal</li></ol>	Life skills and responsibilities promotion



#### Figure 1.

The four main strategies for promoting self-care and reducing risk behaviors of HIV-infected youth and a diagram of Happy Teen Program activities.

Table 1

Characteristics of participants (N = 150).

bex Female		%	Min, Max	Median
Female				
	92	61.3		
Male	58	38.7		
vge (years old)			11, 18	14.0
11–13	53	35.3		
14–16	<i>6L</i>	52.7		
17–18	18	12.0		
ite				
Siriraj	49	32.7		
QSNICH	73	48.7		
Orphanage	28	18.7		
lasma viral load (N= 138 cases)				
aseline				
<50 copies/mL	103	74.6		
>50 copies/mL	35	25.4		
fter enrolled in the Happy Teen Program				p-Value 0.03
<50 copies/mL	114	82.6		
>50 copies/mL	24	17.4		
Duration for IC (min)			15.85	36.5 (12.5)

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Comparison of the proportion of psychosocial issues found on the YCS and counselors note during IC sessions.

		YCS (%)		
IC	Reported problems or issues to discuss	No problems or issues to discuss	Not available	Total (%)
At least one problem detected	108	12	2	122 (81.3)
No problems	10	18	0	28 (18.7)
Total	118 (78.7)	30 (20.0)	2 (1.3)	150

# Table 3

Comparing psychosocial problems found using the YCS with those found during the IC session.

	7	CS	ĺ	<u>ی</u>	
Psychosocial issues	N	%	N	%	<i>p</i> -Value
Health attitude and self-care <sup>a</sup>	21	14.0	72	48.0	<.001
ART adherence	19	12.7	58	38.7	<.001
Self-value b	8	5.3	52	34.7	<.001
Pubertal concerns	-	0.7	36	24.0	<.001
Sexual risk	13	8.7	27	18.0	.003
Other behavioral risks	9	4.0	18	12.0	.017
Life skills <sup>c</sup>	0	0	99	44.0	<.001
Communication skills <sup>d</sup>	32	21.3	60	40.0	<.001

For example, did not eat healthy food, did not practice good sleep hygiene, reported unsafe sex, alcohol or illicit drug use.

 $\stackrel{b}{k}$  For example, concerned about stigma, peer pressure, and partner acceptance.

c<sup>2</sup> For example, did not know how to ask their partners to use condoms, did not know how to assure they took ART while staying with friends, did not know how to organize time or prioritize responsibilities including their job, did not know how to cope with stress in a healthy way.

d For example, unable to say "no" in risky situations, had arguments with their care givers or unable to properly express their thought to their caregivers, lack of confidence to ask questions particularly sensitive questions such as how to develop good relationship with someone they like, how to refuse peer pressure on smoking or doing things they did not want to do.

Table 4

Specific psychosocial issues found during IC sessions by age group.

Psychosocial issuesAge 11-13 yetHealth attitudes and self-careYes28 (66ART adherenceYes23 (54ART adherenceYes23 (54Low self-valueYes19 (45Low self-valueYes18 (42Pubertal concernsYes18 (42Robertal concernsYes24 (57Pubertal concernsYes24 (57Other risksYes9 (21I, fife skillsYes9 (21Life skillsYes22 (52Communication skillsYes22 (52YesYesYes22 (52YesYesYes22 (52YesYesYes22 (52YesYesYes22 (52YesYesYes22 (52Yes <th></th> <th>N (%)</th> <th></th> <th></th>		N (%)		
Health attitudes and self-careYes28 (66No14 (33ART adherenceYes23 (54Low self-valueYes19 (45Low self-valueYes18 (42Pubertal concernsYes18 (42Robertal concernsYes24 (57Sexual riskYes24 (57Conter risksYes9 (21Life skillsYes9 (21Life skillsYes22 (52Communication skillsYes22 (52YesYesYes22 (52YesYesYes22 (52YesYesYes22 (52YesYesYes22 (52Yes<	Age 11–13 years	Age 14– 16 years	Age 17– 18 years	<i>p</i> -Value
No14 (33)ART adherenceYes23 (54)Low self-valueNo19 (45)Low self-valueYes18 (42)Pubertal concernsYes18 (42)Robertal concernsYes24 (57)Pubertal concernsYes24 (57)Robertal concernsYes24 (57)Robertal concernsYes24 (57)Robertal concernsYes24 (57)Robertal concernsYes24 (57)Sexual riskYes24 (57)Communication skillsYes22 (52)Communication skillsYes22 (52)	-care Yes 28 (66.7)	37 (56.1)	7 (50.0)	0.42
ART adherenceYes23 (54)Low self-valueNo19 (45)Low self-valueYes18 (42)Pubertal concernsYes18 (42)Rudertal concernsYes24 (57)Sexual riskYes24 (57)Other risksYes9 (21)Life skillsYes22 (52)Life skillsYes22 (52)Communication skillsYes22 (52)	No 14 (33.3)	29 (43.9)	7 (50.0)	
No19 (45Low self-valueYes18 (42Pubertal concernsNo24 (57Pubertal concernsYes18 (42Sexual riskNo24 (57Sexual riskYes5 (11No789 (21Coher risksYes9 (21Life skillsYes22 (52Communication skillsYes22 (52	Yes 23 (54.8)	29 (43.9)	6 (42.9)	0.51
Low self-valueYes18 (42Pubertal concernsNo24 (57Pubertal concernsYes18 (42Sexual riskNo24 (57Sexual riskYes5 (11Other risksYes9 (21Life skillsYes22 (52Life skillsYes22 (52Communication skillsYes22 (52	No 19 (45.2)	37 (56.1)	8 (57.1)	
No24 (57)Pubertal concernsYes18 (42)Robertal concernsNo24 (57)Sexual riskYes5 (11)Sexual risksYes9 (21)Other risksYes9 (21)Life skillsYes22 (52)Life skillsYes22 (52)Communication skillsYes22 (52)	Yes 18 (42.9)	27 (40.9)	7 (50.0)	0.82
Pubertal concernsYes18 (42No24 (57No24 (57Sexual riskYes5 (11No37 (889 (21Other risksYes9 (21Life skillsYes22 (52Life skillsYes22 (52Communication skillsYes22 (52	No 24 (57.1)	39 (59.1)	7 (50.0)	
No24 (57Sexual riskYes5 (11No37 (88Other risksYes9 (21No33 (7878Life skillsYes22 (52Communication skillsYes22 (52	Yes 18 (42.9)	15 (22.7)	3 (21.4)	0.06
Sexual riskYes5 (11No37 (88Other risksYesOther risksYesLife skillsYesLife skillsYesCommunication skillsYesYes22 (52Yes	No 24 (57.1)	51 (77.3)	11 (78.6)	
No37 (88Other risksYes9 (21No33 (7873Life skillsYes22 (52No20 (47YesCommunication skillsYes22 (52	Yes 5 (11.9)	18 (27.3)	4 (28.6)	0.14
Other risksYes9 (21)No33 (78)Life skillsYes22 (52)No20 (47)Communication skillsYes22 (52)	No 37 (88.1)	48 (72.7)	10 (71.4)	
No33 (78Life skillsYes22 (52No20 (4720 (47Communication skillsYes22 (52	Yes 9 (21.4)	7 (10.6)	2 (14.3)	0.30
Life skills Yes 22 (52 No 20 (47 Communication skills Yes 22 (52	No 33 (78.6)	59 (89.4)	12 (85.7)	
No 20 (47 Communication skills Yes 22 (52	Yes 22 (52.4)	36 (54.5)	8 (57.1)	0.95
Communication skills Yes 22 (52	No 20 (47.6)	30 (45.5)	6 (42.9)	
	Yes 22 (52.4)	34 (51.5)	5 (35.7)	0.52
N0 20 (4/	No 20 (47.6)	32 (48.5)	9 (64.3)	