

# การศึกษาเปรียบเทียบความแตกต่างของสุขภาวะทางจิตระหว่าง เด็กวัยรุ่นกำพร้าจากเอดส์ที่ติดเชื้อเอชไอวีและเด็กวัยรุ่นกำพร้า จากเอดส์ที่ไม่ติดเชื้อเอชไอวี

## A COMPARISON OF PSYCHOLOGICAL WELL-BEING BETWEEN HIV-POSITIVE AND HIV-NEGATIVE ADOLESCENT AIDS ORPHANS

จิตาภา ผูกพันธ์ (Jidapa Poogpan, Ph.C)<sup>1</sup>

จินตนา วัชรสินธุ์ (Chintana Wacharasin, Ph.D.)<sup>2</sup>

วรรณิ เตียววิศเรศ (Wanee Deoisres, Ph.D.)<sup>3</sup>

### บทคัดย่อ

สุขภาวะทางจิตสามารถส่งผลกระทบต่อปัญหาสุขภาพจิต เช่น ภาวะซึมเศร้า ความโดดเดี่ยว ความสิ้นหวัง เด็กวัยรุ่นกำพร้าจากเอดส์ที่ติดเชื้อเอชไอวีมีแนวโน้มที่จะมีภาวะความกดดันทางจิตใจ ดังนั้น การศึกษาวิจัยครั้งนี้มีวัตถุประสงค์เพื่อบรรยายและเปรียบเทียบสุขภาวะทางจิตของเด็กวัยรุ่นที่กำพร้าจากเอดส์ระหว่างกลุ่มที่ติดเชื้อเอชไอวีและไม่ติดเชื้อเอชไอวี เก็บรวบรวมข้อมูลโดยการสุ่มอย่างแบบแบ่งกลุ่มจาก 10 อำเภอในจังหวัดมหาสารคาม จากเด็กวัยรุ่นที่ติดเชื้อเอชไอวี จำนวน 47 คน และไม่ติดเชื้อเอชไอวี จำนวน 51 คน โดยใช้แบบสอบถามข้อมูลส่วนบุคคล และแบบวัดสุขภาวะทางจิต วิเคราะห์ข้อมูลโดยใช้สถิติเชิงบรรยาย และ independent t-test

ผลการศึกษาพบว่า เด็กวัยรุ่นที่กำพร้าจากเอดส์ที่ไม่ติดเชื้อเอชไอวีมีค่าเฉลี่ยคะแนนสุขภาวะทางจิตสูงกว่าเด็กวัยรุ่นที่กำพร้าจากเอดส์ที่ติดเชื้อเอชไอวีอย่างมีนัยสำคัญทางสถิติ ( $t = 2.48, p < .05$ ) สุขภาวะทางจิตของเด็กวัยรุ่นที่กำพร้าจากเอดส์ที่ไม่ติดเชื้อเอชไอวีมีคะแนนสุขภาวะทางจิตอยู่ในระดับสูง และเด็กกำพร้าจากเอดส์ที่ติดเชื้อเอชไอวีมีคะแนนสุขภาวะทางจิตอยู่ในระดับปานกลาง ผลการวิจัยนี้สามารถใช้เป็นข้อมูลพื้นฐานในการปฏิบัติการพยาบาล และเป็นประโยชน์สำหรับการศึกษาวิจัยต่อไป พยาบาลหรือทีมสุขภาพควรให้ความสนใจที่จะส่งเสริมสุขภาวะทางจิตให้เด็กวัยรุ่นที่กำพร้าจากเอดส์ที่ติดเชื้อเอชไอวีเหล่านี้

คำสำคัญ: เด็กวัยรุ่น กำพร้า; เอชไอวี; สุขภาวะทางจิต

<sup>1</sup> Ph.D. Candidate, Doctor of Philosophy (Nursing Science) (International Program), Faculty of Nursing, Burapha University, Email:jpoogpan@gmail.com

<sup>2</sup> Associate Professor, Faculty of Nursing, Burapha University, Email:chintana@buu.ac.th

<sup>3</sup> Associate Professor, Faculty of Nursing, Burapha University, Email:wanee@buu.ac.th

### Abstract

Psychological well-being can contribute to mental health problems, such as depression, loneliness, and the feeling of hopelessness. HIV-positive adolescent orphans tend to exhibit high psychological distress. The purpose of this research was to describe and compare the psychological well-being among adolescent AIDS orphans: forty-seven HIV-positive adolescent orphans and 51 HIV-negative adolescent orphans. Cluster random sampling was employed to obtain adolescent AIDS orphans from 10 districts of Maharakham province in Thailand. Data were collected by using the Demographic Record Form and the Psychological Well-being Scale, and the data were analyzed by using descriptive statistics and independent t-test.

The results of this study revealed that mean scores for the psychological well-being of the adolescent AIDS orphans with non-HIV infection were significantly higher than the adolescent AIDS orphans with HIV infection ( $t = 2.48, p < .05$ ). The psychological well-being was at a high level among the non-HIV-infected adolescent orphans and at a moderate level among the HIV-infected adolescent orphans. The findings of this study can be utilized for implementation in nursing practice and in further research. Professional nurses or healthcare providers should pay attention to the improvement of the psychological well-being of HIV-infected adolescent AIDS orphans.

**Keywords:** adolescent AIDS orphans; HIV/AIDS; psychological well-being

### Introduction

Adolescent AIDS orphans with HIV positive and HIV negative are unavoidably face numerous difficulties and psychosocial challenges, which contribute to their psychological well-being. This can include anxiety, low self-esteem, guilt, loneliness, social withdrawal, depression, and hopelessness (Cluver & Gardner, 2006; Santis, Colin, Vasquez, & McCain, 2008). They have to confront difficulties in adjusting to daily life, changing roles in the family, separation from close siblings, and uncertainty about the future. In their daily life, they often have poor diet, inadequate clothing, poor health care, and lack

of educational support (Nyamukapa et al., 2008). If the AIDS parent who died was the primary wage earner, the household structure would unavoidably change; the adolescent then becomes the head of the household. However, they may be placed in other households and find the resources to endure daily living. They face uncertain future from the prospect of not finishing school, relocation, living with others, to a loss of family ties. This may lead to mental health issues (Cluver & Orkin, 2009). Additionally, they also deal with the psychosocial problems. Atwine, Cantor-Graae, and Bajunirwe (2005) showed that adolescent AIDS orphans have high levels of psychological distress.

Nyamukapa and associates (2008) also found that AIDS orphans have more psychosocial distress than non-orphans. Moreover, adolescent AIDS orphans experience very high levels of peer problems as they relate to others. Delva and associates (2009) compared the psychological well-being between AIDS orphans aged 10 to 18 years and those orphaned by other causes. They discovered that the AIDS orphans' psychological well-being scores were significantly lower. Fang and associates (2009) reported that AIDS orphans consistently demonstrated poor psychosocial adjustment.

Adolescent AIDS orphans, both in the HIV positive and negative groups, can achieve psychological well-being (Delva et al., 2009). They can maintain a normal daily life, go to school, have positive relationships with others, accept themselves, set goals for their life, and participate in social activities. Further, they can meet the consequences of psychological well-being by achieving optimal mental health. The World Health Organization [WHO], (2005) addressed the idea that good mental health is the productive social relationships, effective learning, and ability to care for one's self and overcome adversities; psychological well-being is viewed as positive mental health. Adolescents can survive these adversities because their developing mind can adapt to events. Psychological well-being keeps away from psychological distress. (Cluver, Orkin, Boyes, Gardner, & Nikelo, 2012).

As mentioned above, little is known about the differences of psychological well-being between adolescent AIDS orphans who are HIV positive and

HIV negative. Despite the fact that psychological well-being affects other aspects of the life of people living with HIV/AIDS, it is still need to explore psychological well-being between the HIV infected and non-infected groups. Adolescent AIDS orphans with HIV infection are not only deal with the aspect of being AIDS orphans, but also affected simultaneously by having HIV infection. Therefore, this study aimed to describe and compare the psychological well-being among adolescent AIDS orphans with and without HIV infection. An awareness of how to establish and enhance the psychological well-being of adolescent AIDS orphans with HIV infections is needed in order to optimize their mental and emotional development.

### **Research methodology**

A cross-sectional, descriptive and comparative research design was used. Cluster random sampling was used to obtain adolescent AIDS orphans from the HIV clinic of a provincial hospital and their home in 10 districts of Mahasarakham province in Thailand, since this setting has a private area, a multidisciplinary health care team, and a strong HIV patient network with a self-help group. The 47 HIV-infected adolescent AIDS orphans and 51 non-HIV-infected adolescent AIDS orphans were recruited during January and December, 2014. A sample size of equal or greater than thirty is considered large enough because the conditions were met both normal distribution and no outlier (Bland and Altman, 2009). Inclusion criteria were adolescents aged between 12 and 18 years old who had lost one or both parents due to AIDS, ability to answer the

study questionnaires, and no cognitive impairment. No one refused to complete the questionnaires and no one withdrew from the study.

The instruments consisted of a Demographic Record Form and the Psychological Well-being Scale. The Psychological Well-being Scale (Maneesri, 2007) was a 45-item, self-report scale with responses ranging from 1 (very strongly disagree) to 7 (very strongly agree). The possible scores could range from 45 to 315. The higher score indicated a greater psychological well-being. Scores were divided equally into three categories for this study to determine the level of psychological well-being: low (scores = 45 to 135), moderate (scores = 136 to 225), and high (scores = 226 to 315). The content validity index was .86. The internal consistency reliability with Cronbach's alpha was .89.

#### **Ethical considerations**

The Institutional Reviewed Board (IRB) of Faculty of Nursing, Burapha University had approved the IRB number 07-11-2556. Also, the Mahasarakham Hospital IRB had approved the IRB number 008/2557. The study was explained to all eligible adolescents and their parent/guardian. The parent/guardian signed the informed consent form to give permission regarding their children's participation; the adolescent also signed the informed assent form. Anonymity and confidentiality of the data is strictly protected. It could be accessed only by the researchers.

#### **Data collection procedures**

The researcher recruited the adolescents either at the HIV clinic or met them in a private counseling room. Then, the researcher provided the details of the

study and asked for the parents' permission for their children's participation. Data collection began after the participants signed the assent form and their parent signed the consent form to permit their children to participate in the study. The questionnaires were completed by the participants (both adolescent AIDS orphans with HIV positive and HIV negative). The participants could ask the researcher questions about the questionnaire at any time. After collecting all data allowed the participants to ask questions related to the study, if desired.

#### **Data analysis**

The statistical assumptions were met the normality and no outlier. Data were analyzed by using descriptive statistics and independent-t-test.

#### **Results**

The samples included 47 adolescent AIDS orphans with HIV positive and 51 adolescent AIDS orphans with HIV negative (see Table 1). Majority of both groups were late adolescents aged between 16 to 18 years old (55.32% and 54.90%, respectively). The average age was 15.51 years (S.D. = 2.24). Almost half were male (46.81% and 49.02%), and the remaining adolescents were female (53.19% and 50.98%). They had been orphan for an average of 10.61 years prior to the study; most of them (both groups) were orphaned for more than 6 years (76.59% and 72.54%). Majority of the adolescents with HIV-infected group has been living with other (68.08%), following by living with their father (17.02%) and their mother (14.90%); whereas, majority of the non-infected group has been living with their mother (58.82%), following

by other (25.49%), and father (15.69%). Approximately two-thirds of the adolescents in both groups lived in a household of 4 persons or more (70.21% and 62.75%, respectively). Regarding the HIV-infected group, the guardians earned a family income mostly from 5,001-10,000 Baht per month (42.55%), while for the non-infected group, the guardians earned a family income of mostly less than

or equal to 5,000 Baht per month (74.51%). Their guardians were mostly less than 60 years of age in both groups, with an average age of 48.49 years ( $SD=10.47$ ). The guardians of both groups were female (55.32% and 70.59%), healthy (93.62% and 74.51%), worked in agriculture (68.08% and 58.82%), remarried (53.19% and 54.98%), and finished primary school (76.59% and 58.82%).

**Table 1** Demographic characteristic of adolescent AIDS orphans and their guardians (HIV-infected group = 47, Non-HIV-infected group =51)

Characteristics	HIV-infected group (n=47) (n (%))	Non-infected group (n=51) (n (%))
<b>Adolescents</b>		
Age(years) (mean=15.51, SD=2.24, range=12-18)		
12-15	21(44.68)	23(45.10)
16-18	26(55.32)	28(54.90)
Gender		
Male	22(46.81)	25(49.02)
Female	25(53.19)	26(50.98)
Education		
No study	44(8.51)	2(3.92)
Study	43(91.49)	48(94.12)
No answer	-	1(1.96)
HIV infection status		
	47(100.00)	51(100.00)
Years after parents' death (mean = 0.61, SD = 4.22, range = 1-17)		
0-6 years	9(19.15)	7(13.73)
> 6 years	36(76.59)	37(72.54)
No answer	2(4.26)	7(13.73)
Relationship with guardian		
Mother	7(14.90)	30(58.82)
Father	8(17.02)	8(15.69)
Other	32(68.08)	13(25.49)

**Table 1** Demographic characteristic of adolescent AIDS orphans and their guardians (HIV-infected group = 47, Non-HIV-infected group =51) (cont.)

Characteristics	HIV-infected group (n=47) (n (%))	Non-infected group (n=51) (n (%))
Members in the family (persons) (mean=4.11, SD=1.41, range=2-8)		
≤3	14(29.79)	19(37.25)
≥4	33(70.21)	32(62.75)
Family income (Baht/month) (mean=5415.38, SD=6180.94, range=600-50000)		
≤5,000	18(38.30)	38(74.51)
5,001-10,000	20(42.55)	8(15.69)
≥10,000	4(8.51)	3(5.88)
No answer	5(10.64)	2(3.92)
<b>Parent/Guardian</b>		
Age (years) (mean=48.49, SD=10.47, range=35-80)		
< 60	33(70.21)	48(94.12)
≥60	14(29.79)	3(5.88)
Gender		
Male	21(44.68)	15(29.41)
Female	26(55.32)	36(70.59)
Health status		
Healthy	44(93.62)	38(74.51)
Ill	3(6.38)	13(25.49)
Marital status		
Single	8(17.02)	12(23.53)
Remarried	25(53.19)	28(54.90)
Divorced	10(21.28)	7 (13.73)
Separated	4(8.51)	4(7.84)
Occupation		
Agriculture	32(68.08)	30(58.82)
Employee	12(25.53)	15(29.41)
Business	1(2.13)	2(3.92)
Other	2(4.26)	4(7.84)
Education		
No school	1(2.13)	2(3.92)
Primary school	36(76.59)	30(58.82)
Secondary school	10(21.28)	17(33.33)
Bachelor degree	-	2(3.92)

**Table 2** Descriptive statistics of the psychological well-being and subscales of adolescent AIDS orphans (n=98)

Variable and subscales	Possible range	Actual range	Mean	SD	Level
Psychological well-being	45-315				
Non-HIV-infected group		172-285	228.20	28.79	High
HIV-infected group		163-266	214.45	25.81	Moderate
1. Self-acceptance	8-56				
Non-HIV-infected group		26-51	40.41	6.26	Moderate
HIV-infected group		29-48	37.87	4.89	Moderate
2. Positive relation with others	8-56				
Non-HIV-infected group		30-53	40.73	5.18	Moderate
HIV-infected group		28-52	38.19	5.95	Moderate
3. Autonomy	8-56				
Non-HIV-infected group		26-53	37.69	6.05	Moderate
HIV-infected group		19-49	35.02	6.38	Moderate
4. Environmental mastery	7-49				
Non-HIV-infected group		24-46	36.90	5.95	High
HIV-infected group		23-45	34.89	5.20	Moderate
5. Purpose in life	8-58				
Non-HIV-infected group		29-52	40.59	5.88	Moderate
HIV-infected group		29-52	38.72	6.35	Moderate
6. Personal growth	6-42				
Non-HIV-infected group		22-42	31.88	5.66	High
HIV-infected group		21-41	29.74	5.14	Moderate

Table 2 showed over all psychological well-being scores with six subscales, including self-acceptance, positive relations with other, autonomy, environmental mastery, purpose in life, and personal growth. The psychological well-being of adolescent AIDS orphans with non-HIV infection ranged from 172 to 285 with a mean of 228.20 ( $SD. = 28.79$ ), indicating a high level. On the other

hand, the adolescent AIDS orphans with HIV infection were at a moderate level, ranging from 163 to 266 with a mean of 214.45 ( $SD. = 25.81$ ). The results showed that the adolescent AIDS orphans with non-HIV infection yielded a high level of environmental mastery and personal growth subscales, while the adolescent AIDS orphans with HIV infection had a moderate level for all subscales.

**Table 3** Comparison of the psychological well-being and subscales between adolescent AIDS orphans in the HIV-infected group (n=47) and the non-HIV-infected group (n=51)

Scale and subscales	Non-infected group	Non-HIV-infected group	T	df	p-value
Psychological well-being	214.45	228.20	2.48	0.57	0.02
1. Self-acceptance	37.87	40.41	2.23	2.31	0.03
2. Positive relation with others	38.19	40.73	2.25	1.03	0.03
3. Autonomy	35.02	37.69	2.12	0.31	0.04
4. Environmental mastery	34.89	36.90	1.77	1.48	0.08
5. Purpose in life	38.72	40.59	1.51	0.06	0.13
6. Personal growth	29.74	31.88	1.95	1.28	0.05

Comparisons the total score of psychological well-being between adolescent AIDS orphans with HIV infection and non-HIV infection, analyzed by using an independent t-test, was presented in Table 3. The mean scores for the psychological well-being of the adolescent AIDS orphans with non-HIV infection were significantly higher than the adolescent AIDS orphans with HIV infection ( $t = 2.48$ ,  $p < .05$ ). Moreover, mean difference of each subscale of psychological well-being between the infected and non-infected groups were analyzed. There were statistically significant difference for the subscale of self-acceptance ( $t = 2.23$ ,  $p < .05$ ), positive relation with others ( $t = 2.25$ ,  $p < .05$ ), and autonomy ( $t = 2.12$ ,  $p < .05$ ) between the adolescent AIDS orphans with HIV infection and those without HIV infection. There were no significant differences for the subscale of environmental mastery, purpose in life, and personal growth between both groups.

## Discussion

The results showed that the psychological well-being of the non-HIV-infected adolescent AIDS orphans was at a high level, whereas it was at a moderate level for the HIV-infected adolescent AIDS orphans. Moreover, the total scores of psychological well-being were compared between the non-HIV-infected adolescent AIDS orphans and the HIV-infected adolescent AIDS orphans. The results revealed that the mean scores of psychological well-being of the non-HIV infected adolescent AIDS orphans were significantly higher than those of the HIV-infected adolescent AIDS orphans. Psychological well-being is usually viewed as health with the "absence of illness" rather than the "presence of wellness" (Ryff & Singer, 1996). Then, the HIV infected adolescences who deal with health status of being HIV infected child. Their perceptions could diminish their psychological well-being. They might feel uncertain about life.

On the other hand, the non-HIV-infected adolescent AIDS orphans had higher psychological well-being.

In addition, The results showed that the non-HIV infected individuals yielded significantly higher overall psychological well-being, and the subscales of self- acceptance, positive relation with others, and autonomy than the HIV-infected AIDS adolescent orphans. Whenever persons can maintain psychological well-being, they could achieve psychological and social functioning (WHO, 2005). Hence, the HIV infected adolescences who perceived themselves with HIV infected status will be stigma. Prior evidence indicated that HIV-related stigma is viewed negatively by people who know AIDS orphans (Deacon, Stephene, & Prosalendis, 2005). Finally, they yielded negative perception to themselves. Consequently, they lost the self-acceptance, positive relation, and autonomy. However, the results showed no significant differences between the adolescent AIDS

orphans with HIV infection and those without HIV infection for the subscale of environmental mastery, purpose in life, and personal growth. Normally, human makes some adaption when confronting and solving problems.

### Implications

The findings of this study can be applied in nursing practice and for further research. Professional nurses or health care providers should pay attention on improving psychological well-being in caring for HIV-infected adolescent AIDS orphans. Although, both groups were adolescent AIDS orphans, they were different in HIV infected status. Nurses should encourage this group of adolescents by strengthening their competence, providing health education, and concerning on their vulnerable. Therefore, the implementation of interventions for specific programs for the HIV- infected adolescent AIDS orphans should focus on promotion of psychological well-being.

### References

- Atwine, Cantor-Graae, and Bajunirwe (2005). *Methods in sample surveys: Cluster sampling*. Department of Biostatistics, School of Hygiene and Public Health, Johns Hopkins University.
- Bland J.M, Altman D.G. (2009) Analysis of continuous data from small samples. *British Medical Journal*, 338, a3166.
- Cluver, L., & Gardner, F. (2006). Cluver, L., & Gardner, F. (2006). The psychological well-being of children orphaned by AIDS in Cape Town, South Africa. *Annals of General Psychiatry*, 5(8), 1-9.
- Cluver, L., & Orkin, M. (2009). Stigma, bullying, poverty and AIDS-orphanhood: Interactions mediating psychological problems for children in South Africa. *Social Science and Medicine*, 69, 1186-1193.

- Cluver, L.D., Orkin, M., Boyes, M.E., Gardner, F., & Nikelo, J. (2012). AIDS-orphan and caregiver HIV/AIDS sickness status: Effects on psychological symptoms in South African youth. *Journal of Pediatric Psychology, 37*, 857-67.
- Deacon, H., Stephney, I., & Prosalendis, S. (2005). *Understanding HIV/ AIDS stigma: A theoretical and methodological analysis*. Cape Town: HSRC press.
- Delva, W., Vercoutere, A., Loua, C., Lamah, J., Vansteelandt, S., De Koker, P., Claeys, P., Temmerman, M., & Annemans, L. (2009). Psychological well-being and socio-economic hardship among AIDS orphans and other vulnerable children in Guinea. *AIDS Care, 21*, 1490-1498.
- Fang, X., Li, X., Stanton, B., Hong, Y., Zhang, L., Zhao, G., Zhao, J., & Lin, D. (2009). Parental HIV/ AIDS and psychosocial adjustment among rural Chinese children. *Journal of Pediatric Psychology, 34*, 1053-1062.
- Nyamukapa, C. A., Gregson, S., Lopman, B., Saito, S., Watts, H. J., Monasch, R., & Jukes, M. C. (2008). HIV-Associated orphan and children's psychosocial distress: theoretical framework tested with data from Zimbabwe. *American Journal of Public Health, 98*, 133-141.
- Maneesri, K. (2007). *Psychological well-being scale*. Bangkok: The Psychological Well-Being Center, Faculty of Psychology, Chulalongkorn University.
- Pelton, J., & Forehand, R. (2005). Orphans of the AIDS epidemic: An examination of clinical level problems of children. *Journal of the American Academy of Child and Adolescent Psychiatry, 44*(6), 585-591.
- Rotheram-Borus, M. J., Lee, M., Lin, Y. Y., & Lester, P. (2004). Six-year intervention outcomes for adolescent children of parents with human immunodeficiency virus. *Archives of Pediatric and Adolescent Medicine, 158*(8), 742-748.
- Ryff, C.D., & Singer, B. (1996). Psychological well-being: Meaning, measurement, and implications for psychotherapy research. *PsychotherPsychosom, 65*(1), 14-23.
- Santis, J.P., Colin, J.M., Vasquez, E.P. & McCain, G.C. (2008). The relationship of depressive symptoms, self-esteem, and sexual behaviors in a predominantly Hispanic sample of men who have sex with men. *American Journal of Men's Health, 2*, 314-321.
- World Health Organization [WHO]. (2005). *Mental health policy and service guidance package: Child and adolescent mental health policies and plans*. Geneva: World Health Organization.