

People Living with HIV/AIDS in the City of Bangkok: Quality of Life and Related Factors

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Objective: To assess the quality of life and factors related to quality of life among people living with HIV/AIDS in Bangkok, Thailand.

Material and Method: A cross-sectional survey research was conducted among 138 people aged over 18 years living with HIV/AIDS in Bangkok. The sample was selected by purposive sampling from HIV infected persons who attended the HIV clinic at the hospitals in Bangkok. Data were collected by self-administered questionnaires from June to July 2010 and analyzed by frequency, percentage, mean, standard deviation, Chi-square test and Pearson Product Moment Correlation Coefficient.

Results: The finding revealed that of the people living with HIV/AIDS, 67.4% reported a moderate level with respect to quality of life and 32.6% reported a good level concerning the quality of life. Factors related to quality of life were age, education level, monthly income, self-esteem, family relationships and social support ($p < 0.05$).

Conclusion: All of the people living with HIV/AIDS reported having a moderate to good quality of life. From research results, responsible organizations should establish activities to promote self-esteem, family relationships and social support for people living with HIV/AIDS to enhance the quality of life of infected persons. Increasing public awareness to better understand basic needs such as family relationships and social support and providing HIV/AIDS education to the community were deemed important.

Keywords: Quality of life, People living with HIV/AIDS, Self-esteem, Family relationships, Social support, City of Bangkok

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Human immunodeficiency virus (HIV) has a devastating physical, psychological and social effect upon those infected and their families. Due to early detection and the availability of highly active antiretroviral treatment, HIV has become a chronic disease rather than a fatal illness. Although the numbers of new infections are on the decline, the level of new infections overall is still high and with significant reductions in mortality, the number of people living with HIV worldwide has increased dramatically.

In 2009, there were an estimated 2.6 million people who became infected with HIV/AIDS. In Asia, an estimated 4.9 million people were living with HIV in 2009. Most national HIV epidemics appear to have stabilized. No country in the region has a generalized

epidemic. Thailand is the only country in this region in which the prevalence is close to 1% and its epidemic appears to be stable overall. There were 360,000 people infected with HIV in 2009, 20% lower than the 450,000 in 2001. Incidence fell by more than 25% in India, Nepal, and Thailand between 2001 and 2009⁽¹⁾.

Enhanced social protection can help reduce an individual's chance of becoming infected with HIV (susceptibility) and reduce the likelihood that HIV will have damaging effects on individuals, households and communities (vulnerability). UNAIDS calls for ensuring existing social protection mechanisms include people living with HIV, populations at higher risk, vulnerable populations and households in order that they can access the services and entitlements that they need. Also, UNAIDS calls for promoting policies and programs that are inclusive, non-stigmatizing and non-discriminatory and promote equity. Living with HIV can impact upon many of the factors that affect quality of life, not only physical health, but also mental and social well-being⁽²⁾.

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Quality of life (QOL) is a term that is popularly used to convey an overall sense of well-being and includes aspects such as happiness and satisfaction with life as a whole. The World Health Organization has defined QOL as individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, standards, expectations and concerns⁽³⁾. With current advanced clinical tests and treatments for those suffering from human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), the survival rate of these patients has been increasing, and their QOL has become an important focus for researchers and healthcare providers. Since the discovery of HIV at the beginning of the 1980s, HIV/AIDS has been a major health problem for the world. HIV/AIDS places an increasing burden on the health of the population and causes further socioeconomic problems for individuals, families, communities and governments in many countries. For a person living with HIV, this means having to cope with a range of HIV-related symptoms for extended periods. Symptoms may be related to the infection itself, comorbid illnesses, or iatrogenic effects from HIV-related medications. Many of the HIV patients struggle with numerous social problems such as stigma, poverty, depression, substance abuse and cultural beliefs which can affect their QOL, not only from the physical health aspect, but also from mental and social health point of view that causes numerous problems in useful activities and interests of the patients⁽⁴⁾. Several factors associated with better QOL among HIV-infected patients have been reported in international literature. The impact of HIV upon QOL falls under four major domains, which are the physical, psychological, social and environmental domains. The study of Tangkawanidh T et al⁽⁵⁾ found that age, social support and antiretroviral treatment had a positive effect on the quality of life among people living with HIV/AIDS in the Northern region of Thailand. The study of Chandra PS et al⁽⁶⁾ showed that among people living with HIV/AIDS, men had a significantly higher quality of life in India. Socio-demographic characteristics, such as male gender, youth, higher socio-economic status and employment have been associated with improvement in the QOL.

Thus, the present study aimed to explore the quality of life and relevant factors. Assessing quality of life is useful for documenting the patients' perceived burden of chronic disease, tracking the factors affecting the quality of life may be beneficial for concerned agencies to formulate a health policy, planning,

prevention and management care for people living with HIV/AIDS.

Material and Method

A cross-sectional study was conducted in an HIV clinic in a hospital in Bangkok, Thailand. The data were collected by self-administered questionnaires from June to July, 2010. The sample included 138 people living with HIV over 18 years old, living in Bangkok for at least 6 months and having been infected for more than 3 months. The sample was selected by purposive sampling. In the present study, the researchers used the WHOQOL-BREF-THAI as the instrument to assess the quality of life. The present study of Sakthong P et al⁽⁷⁾ shows that WHOQOL-BREF-THAI can be a good generic health-related quality of life instrument in HIV/AIDS patients. The research instruments included questionnaires with six parts; Part I included questions to elicit information regarding basic demographics of the sample including age, sex, education, marital status, family type, monthly income, current occupation; Part II questioned about accessibility to health services, measured in terms of distance, the time to get to health services and waiting time for health care service; Part III included 10 questions to evaluate self-esteem based on a concept of self-esteem of Coppersmith S⁽⁸⁾, categorized as low, moderate and high levels; Part IV contained 8 questions covering family relationships, which were classified as poor, fair, and good; Part V asked 10 questions about social support based on the social support concept of Cobb S⁽⁹⁾ and Schaefer C et al⁽¹⁰⁾ and was classified as low, moderate and high; Part VI was the WHOQOL-BREF THAI⁽¹¹⁾ with 26 questions to assess the quality of life, classified as good, moderate and poor.

The interview questionnaire parts I to V was examined by the experts for content validity. Reliability was accomplished by a pilot study among 30 cases who had similar characteristics to those of the present study sample. The Cronbach's Alpha Coefficients of the questionnaires were as follows: self-esteem = 0.83, family relationships = 0.80, social support = 0.82 and quality of life = 0.84 respectively.

Data were analyzed by frequency, percentage, mean, standard deviation, Chi-square test and Pearson Product Moment Correlation Coefficients.

Ethical consideration

The research proposal was reviewed and approved by the Ethics Committee for Human Research, Faculty of Public Health, Mahidol University, Bangkok

Table 1. Number and percentage of the people living with HIV/AIDS by characteristics (n = 138)

Characteristics	n	%
Sex		
Male	74	53.6
Female	64	46.4
Age (year)		
20-29	10	7.3
30-39	60	43.4
40-49	58	42.0
50-59	10	7.3
Mean = 39.01, SD = 7.3, MIN = 23.00, MAX = 59.00		
Marital status		
Married	53	38.4
Single	47	34.1
Widow/Separated	29	21.0
Divorced	9	6.5
Education		
Primary school	37	26.8
Secondary school	43	31.2
Vocational	29	21.0
University	21	15.2
Post graduate	8	5.8
Occupation		
Labor	79	57.2
Trading/Marketing	30	21.7
Unemployed	10	7.3
Working in company	9	6.5
Non-Governmental Organizations (NGO)	6	4.4
Government officer	3	2.2
Housekeeper	1	0.7
Monthly income (baht)		
Less than 6,000	62	44.9
6,000-9,000	27	19.6
More than 9,000	27	19.6
Uncertain	22	15.9
Mean = 7,851, SD = 6,605, Min = 600, Max = 50,000		
Family type		
Nuclear	96	69.6
Extended	42	30.4
Distance to health care center		
Less than 8 kms	52	37.7
8-16 kms	51	37.0
More than 16 kms	35	25.3
Waiting time for health service		
Less than 30 min	35	25.4
30-60 min	49	35.5
More than 60 min	54	39.1
Mean = 84, SD = 58.6, Min = 5, Max = 270		

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Results

Characteristics of people living with HIV/AIDS

The findings of 138 people living with HIV, about half (53.6%) were male, 46.4% were female. Age

ranged from 23 to 59 years, 7.3% were 20-29 years, 43.4% were 30-39, 42.0% were 40-49 and 7.3% were over 50. The mean age was 39.01. 38.4% were married, 34.1% were single, 21.0% were widowed/separated, 6.5% were divorced and 8% separated. In terms of education, 26.8% finished primary school, 31.2%

Table 1. (Cont)

Characteristics	n	%
Convenient of transportation		
Yes	123	89.1
No	15	10.9
Self-esteem		
Low (10-17)	2	1.5
Moderate (18-23)	78	56.5
High (24-30)	58	42.0
Family relationship		
Good (19-24)	58	42.0
Fair (14-18)	73	52.9
Poor (8-13)	7	5.1
Social support		
Low (10-17)	8	5.8
Moderate (18-23)	76	55.1
High (24-30)	54	39.1

Table 2. Number and percentage of the people living with HIV/AIDS by Quality of Life (n = 138)

Quality of life	n	%
Good level (96-130)	45	32.6
Moderate level (61-95)	93	67.4

completed secondary school, 21.0% had vocational education, 15.2% graduated university and 5.8% had completed post graduate work. For occupations, 57.2% were laborers, 21.7% were in trade/marketing, 7.3% were unemployed, 6.5% worked for a company, 4.4% worked for an NGO, 2.2% were government officers and 0.7% was housekeepers. Among the participants, 69.6% lived in a nuclear family and 30.4% lived in an extended family. Monthly income was from 600 to 50,000 baht, with the average being 7,851 baht, 44.9% had a monthly income of less than 6,000 baht, 19.6% earned 6,000-9,000 baht, 19.6% made more than 9,000 baht and 15.9% reported uncertain monthly income.

The accessibility of health care services perceived by respondents consisted of distance to health care centers, waiting time and convenience of transportation. 37.7% could get health care within 8 km, 37.0% lived between 8-16 km from a center and 25.3% were over 16 km away. For the waiting time to be seen, 25.4% waited less than 30 min, 35.5% waited for 30-60 min and 39.1% waited more than 60 min. A majority of the respondents had access to convenient transportation while 10.9% did not. In terms of self-esteem levels, more than half (56.5%) reported moderate

levels, with 42.0% reporting high levels and only 1.5% reported a low level of self esteem. For the level of family relationships, about half of them (52.9%) claimed a moderate level, 42.0% high level and 5.1% reported low level family relationships. About half of the respondents (55.1%) had a moderate level of social support, 39.1% received high social support and 5.8% received low social support.

Quality of life of people living with HIV/AIDS

67.4% of the people living with HIV/AIDS reported a moderate level of quality of life while 32.6% claimed a good quality of life.

Factors related to quality of life of people living with HIV/AIDS

The Chi-square test was used to find the association of general characteristics and quality of life. There was a significant association between education level and quality of life ($p < 0.05$). Sex, marital status, family type, occupation were not associated with quality of life for people living with HIV/AIDS (Table 3).

The Pearson Product Moment Correlation Coefficient was used to find the relationship between the variable factors and quality of life. Age had a negative relationship with quality of life ($p = 0.045$), the younger had a better quality of life. Monthly family income had a positive relationship with quality of life ($p = 0.019$), the higher the income the better quality of life. Self-esteem had a positive relationship with quality of life ($p < 0.001$), the higher the self-esteem people

Table 3. Factors association with quality of life of people living with HIV/AIDS (n = 138)

General characteristics	Total	Level of quality of life				*p-value
		Moderate		Good		
		n	%	n	%	
Sex						
Male	74	46	62.2	28	37.8	0.159
Female	64	47	73.4	17	26.6	
Education						
Illiterate & Primary school	37	30	81.1	7	18.9	0.028*
Secondary school	43	32	74.4	11	25.6	
Vocational	29	15	51.7	14	48.3	
University/Post graduate	29	16	55.2	13	44.8	
Marital status						
Single	46	32	69.6	14	30.4	0.843
Married	53	35	66.0	18	34.0	
Divorced/Separate	21	14	66.7	7	33.3	
Widow	18	12	66.7	6	33.3	
Family type						
Nuclear	94	61	64.9	33	35.12	0.304
Extended	44	32	72.7	12	7.3	
Occupation						
Labor	79	59	74.7	20	25.3	0.075
Work in company	19	13	68.4	6	31.6	
Trading/Marketing	30	17	56.7	13	43.3	
Unemployed	10	4	40.0	6	60.0	

*p-value significant at level 0.05

Table 4. Factors related to quality of life of people living with HIV/AIDS (n = 138)

Factors	Quality of life of people living with HIV/AIDS	
	Correlation coefficient (r)	*p-value
Age	-0.172*	0.045
Income	0.22*	0.019
Self-esteem	0.564*	<0.001
Family relationship	0.333*	<0.001
Distance	-0.091	0.287
Waiting time	0.022	0.795
Transportation	-0.052	0.551
Social support	0.531*	<0.001

*p-value significant at level 0.05

had, the better quality of life was reported. Family relationships had a positive relationship with quality of life ($p < 0.001$). The family with good relationships had a better quality of life. Social support reflected a positive relationship with quality of life ($p < 0.001$) and the people who got more social support had a better

quality of life (Table 4).

Discussion

The results showed that 67.4% of the people living with HIV/AIDS had a moderate level of quality of life and all of them had a moderate to good

quality of life. The finding was consistent with the study of Nawanaparatsakul S⁽¹²⁾ in Takhli Hospital, Nakornsawan, Thailand, who found that the quality of life for HIV infected/AIDS patients was at an average level. This might be because nearly half of the respondents (46.4%) were still of working age (less than 40 years old) and the majority of them (73.2%) had finished secondary school or higher and could take care and manage themselves well. Most of respondents (more than 94%) had moderate to high level of self-esteem, social support and family relationships that supported a higher quality of life.

Age was significantly related to quality of life: The younger were physically stronger. They could remain healthy and provided themselves with happiness and a better quality of life, a finding congruent with the study of Abasiubong F et al⁽¹³⁾ and Campsmith ML et al⁽¹⁴⁾ who found that the age of the HIV patient was associated with quality of life. The education also related to quality of life. The majority of respondents (73.2%) finished secondary school or higher and permitted them to know how to take care and manage themselves in leading to a good quality of life, which is congruent with the findings of Campsmith ML et al⁽¹⁴⁾, Nichols L et al⁽¹⁵⁾ and Khumsaen N⁽¹⁶⁾. Self-esteem, which is the attitude, perception and beliefs that people have about themselves and their ability to achieve success, almost all of the respondents (98.5%) had moderate to high levels of self-esteem. This is consistent with the study of Wingood GM et al⁽¹⁷⁾ who found that those African-American women who reported HIV discrimination had lower mean scores for self-esteem and also had a lower quality of life. Family relationships demonstrated a high relationship with quality of life because people living with HIV/AIDS need to talk about their illness status, or share ideas with family members. Family members tended to encourage their family members to reduce feelings of isolation or stigmatization.

Monthly income was also an important factor as those infected needed funds to seek treatment. Monthly income and quality of life were closely associated with one another which is consistent with the findings of Campsmith ML⁽¹⁴⁾ who found income associated with lower QOL scores in older age, female, black or Hispanic ethnicity, intravenous drug use and lower education groups.

Social support is an important aspect for people living with HIV/AIDS, as it can buffer stress and promote a sense of emotional well-being. Social support in the present study had 2 parts, support from

family members and support from friends or neighbors. A majority of the respondents got respect from family members and were invited to parties or social events by neighbors. They also exchanged essential or necessary information with family members and neighbors which was a part of their quality of life. The finding was congruent with the present study of Bastardo YM⁽¹⁸⁾ and Meei-Horng Yang⁽¹⁹⁾ who found that social support was significantly associated with QOL and a higher quality of life was associated with higher levels of social support. From the results of the present study, the authors recommend that responsible organizations should establish activities to enhance public understanding about the basic needs of people living with HIV/AIDS which will indirectly affect self-esteem, family relationships, and social support to enhance their quality of life.

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Potential conflicts of interest

None.

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ผู้ติดเชื้อเอชไอวีในเขตกรุงเทพมหานคร : คุณภาพชีวิตและปัจจัยที่มีความสัมพันธ์

โชคชัย หมั่นแสวงทรัพย์, บาชามาท เบอแอ อีเบลลา โมฮัมเหม็ด แคร่, สุธรรม นันทมงคลชัย

วัตถุประสงค์: เพื่อประเมินภาวะคุณภาพชีวิต และปัจจัยที่มีความสัมพันธ์กับคุณภาพชีวิตของผู้ติดเชื้อเอชไอวีในเขตกรุงเทพมหานคร ประเทศไทย

วัสดุและวิธีการ: การศึกษาเชิงสำรวจภาคตัดขวางในผู้ติดเชื้อเอชไอวีที่มีอายุมากกว่า 18 ปีที่อาศัยในเขตกรุงเทพมหานครจำนวน 138 คน คัดเลือกกลุ่มตัวอย่างแบบเฉพาะเจาะจงจากผู้ติดเชื้อที่มารับบริการแผนกผู้ป่วยนอกเอชไอวี ในโรงพยาบาลเขตกรุงเทพมหานคร เก็บข้อมูลด้วยแบบสอบถามที่ตอบด้วยตัวเองระหว่างเดือนมิถุนายน ถึง กรกฎาคม พ.ศ. 2553 วิเคราะห์ข้อมูลโดยใช้ความถี่ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน ไคแอสควร์ และ สหสัมพันธ์ของเพียร์สัน

ผลการศึกษา: ผู้ติดเชื้อเอชไอวีร้อยละ 67.4 มีคุณภาพชีวิตในระดับปานกลาง และร้อยละ 32.6 อยู่ในระดับดี ปัจจัยที่มีความสัมพันธ์กับคุณภาพชีวิตคือ อายุ ระดับการศึกษา รายได้ต่อเดือน ความรู้สึกมีคุณค่าในตนเอง ความสัมพันธ์ในครอบครัว แรงสนับสนุนทางสังคม โดยมีความสัมพันธ์อย่างมีนัยสำคัญทางสถิติ ($p < 0.05$)

สรุป: ผู้ติดเชื้อเอชไอวีทุกคนมีคุณภาพชีวิตในระดับปานกลางถึงระดับดี หน่วยงานที่เกี่ยวข้องควรจัดกิจกรรมที่ส่งเสริมความรู้สึกมีคุณค่าในตนเอง สัมพันธภาพในครอบครัว แรงสนับสนุนทางสังคมของผู้ติดเชื้อเอชไอวี เพื่อยกระดับคุณภาพชีวิตของผู้ติดเชื้อเอชไอวีให้สูงขึ้น สาธารณชนควรเข้าใจถึงความต้องการพื้นฐานด้านสัมพันธภาพในครอบครัวและแรงสนับสนุนทางสังคมของผู้ติดเชื้อ โดยการให้ความรู้เรื่องการติดเชื้อเอชไอวี แก่สังคมก็มีความสำคัญเช่นกัน
