

# Factors Associated with Risky Behavior for HIV/AIDS Transmission Among Youth Organization in Depok, West Java

Nunuk Nugrohowati<sup>1\*</sup>, Ria MariaTheresa<sup>2</sup>, Inas Hanuniza<sup>3</sup>,  
Ranti K Dewi<sup>3</sup>

<sup>1</sup>Department of Public Health, Faculty of Medicine, UPN Veteran Jakarta, Jakarta, Indonesia

<sup>2</sup>Department of Mental Health Science, Faculty of Medicine, UPN Veteran Jakarta, Jakarta, Indonesia

<sup>3</sup>Medical Undergraduate Program, Faculty of Medicine, UPN Veteran Jakarta, Jakarta, Indonesia

\*Corresponding author. Email: [nnugrohowati@gmail.com](mailto:nnugrohowati@gmail.com)

## ABSTRACT

Depok Health Office, West Java, in 2017 reported that there were 278 HIV infection cases in 2016. In Indonesia there are 785,821 HIV infection cases, including 90,915 new HIV infection cases. Objective: This study aimed to determine the factors associated with risky behavior for HIV/AIDS transmission among youth organization in Depok, West Java. Methods: A cross-sectional study was conducted in Depok, West Java. Total 50 respondents were selected for this study at random. The dependent variable was HIV/AIDS risky behavior. The independent variables were knowledge, attitude, information source, parenting style, traumatic experience, and peer- influence. The data were collected by questionnaire and analyzed by a multiple logistic regression. Results: HIV/AIDS risky behavior increased by lack of knowledge (OR= 0.19; 95% CI=0.43 to 0.86; p=0.006), poor parenting style (OR= 0.15; 95% CI=0.02 to 0.96; p=0.016), traumatic experience (OR=12.20; 95% CI=1.64 to 91.04; p=0.017), and poor peer-influence (OR=6.50; 95% CI=1.71 to 24.68; p=0.007). Conclusion: HIV/AIDS risky behavior increases by lack of knowledge, poor parenting style, traumatic experience, and poor peer-group influence.

**Keywords:** risk behavior, knowledge, attitude, information sources, parenting style, traumatic experience, peer-influence

## 1. INTRODUCTION

Friendship between teenagers to adults in sexually active productive age groups in the Gandul Village, Cinere Subdistrict, Depok City according to the general public has led to strange associations, in the form of rampant LGBT behavior (Lesbian, Gay, Bisexual, Transgender) [1]. According to Director of the NGO Program Kuldesak, Samsu Budiman said that the increase in PLWHA sufferers in Depok was 10% contributed by LGBT behavior. From 613 HIV / AIDS patients transmission infection through Men Loving Men (LSL) 117 person, bisexual lesbian and transgender (LBT) 57 person. The problem is the need to know what symptoms are driving these vulnerable groups to commit risky behaviors that deviate and to what extent they already have risky behaviors the world, including in Indonesia.

The number of people infected with HIV in Indonesia has increased from year to year, in 2015 the number were 184,929 HIV cases, in 2016 increased to 785,821 and total of 90,915 of whom were new people infected with HIV. The increase in cases occurred in the general population (women, men), and Men Loving Men / Gay [9]. The increase in the number of people living with HIV in Indonesia is partly triggered by risk behaviors such as the low use of safety in groups of female sex workers, transsexuals, gays or MSM (Men having Sex with Men) and groups of drug users with syringes [21].

The high morbidity due to HIV infection in Indonesia, especially in vulnerable groups can be influenced by several factors including knowledge about risk behaviors towards HIV and AIDS transmission, attitudes about risk behaviors towards HIV and AIDS, sources of information, parenting style, traumatic experiences, peer-influence and risky

behaviors of transmitting HIV and AIDS. Transmission of HIV and AIDS can be prevented, among others, by applying the principles of cleanliness, normality in social relations and addressing several risk factors that can influence risk behaviors for transmitting HIV / AIDS.

The aim of the Study. 1). State the characteristics of respondents based on predisposing and enabling factors that influence risk behaviors of HIV and AIDS transmission in the Youth Organization Group in the working area of the Gandul Village, Cinere City of Depok, West Java. 2). Define the relationship between predisposing factors and enabling factors in the form of knowledge, attitude, information source, parenting style, traumatic experience, and peer- influence on risk behaviors of HIV and AIDS transmission in the Youth Organization Group in the working area of Gandul Village, Cinere City of Depok, West Java. 3). State the dominant factors influencing the transmission of HIV and AIDS in the Karang Taruna Group in the work area of the Gandul Village, Cinere City of Depok, West Java.

## 2. METHOD

The research design used was observational analytic, with cross sectional research methods, namely by collecting data at a time. The study was conducted in the Gandul Region, Depok City, West Java Province, on two Youth Organization groups in the Gandul area, Cinere, Depok City, West Java in August 2019. The target population in this study were members of Youth Organization group X and Y who lived scattered around the area of Gandul region. Initially the sampling technique used was Simple Random Sampling technique based on the list of members of Youth Organization, because all research samples were considered to be the same without discriminating samples. The invitations were distributed to the two Youth Organization Groups, , the sample measurement in this study was finally carried out by means of a total sampling population based on the members who came to meet the invitation which are a number of 50 people.

The independent variables are predisposing factor consisting of knowledge about risky behaviors towards HIV and AIDS transmission, attitudes about risky behaviors towards HIV and AIDS transmission, parenting style, traumatic experiences, peer influence and enabling factors, namely information sources. Risky behaviors of HIV and AIDS transmission as a dependent variable. The research instrument used was primary data obtained by distributing questionnaires to members of the groups in the working area of Gandul region. The primary data variables were collected by questionnaires from [16] and [6], both independent and dependent variables. Result of Information sources about HIV and AIDS variable categorized into lack (with <5 information sources) and sufficient (with >= information source), while Knowledge about HIV /AIDS and Parenting style measured by good (when >=median) and poor (when <median). On attitude about HIV and AIDS categorized into agree and disagree, Peer-influence measured by had

affected (>=average score) and not affected (<average score) also had or not some traumatical experience. Risky Behavior about HIV AIDs transmission as a dependent variable measured by risk and no risk.

## 3. RESULTS AND DISCUSSION

Table 1. The Characteristics Distribution of Respondent Based on Gender, Age and Activity

Variable	N	%
<b>Age</b>		
Men	19	38
Women	31	62
<b>Age</b>		
13-14	10	20
15-17	6	12
18-20	6	12
21-40	17	34
41-45	11	22
<b>Activity</b>		
Pupil	16	32
Student	6	12
Work	16	32
no working / housewife	12	24

Distribution based on gender, male as much as 38% while distribution of female were 62%. Distribution of ages between 13-14 years old were 10 people (20%), while 6 people (12%) were 15-17 years old. Ages between 18-20 years old as many as 6 people (12%), there were 17 people (34%) aged 21-40 years old and aged 41-45 years old as many as 11 people (22%). Student distribution were 12%, pupil were 32%, and working were 32%, while not working / Housewife were 24%. The majority of women (62%) were present, the most respondents who present at the age of 21-40 years old were 34 %, and the most present were pupils and workers 32% respectively. This means that average women had a greater curiosity than men, members of the youth group who had a concern were mainly between the ages of 21-40 years old while the majority of pupils and workers had desire to attend this event. This was consistent with the report of the situation of HIV AIDs in the fourth quarter of October to December 2017 that the percentage of HIV disease was highest was highest in the age group of 25-49 49 years old (69.2%) [8].

Analysis the results of characteristics variables under study (see Table 2 below): A total of 23 respondents (46%) had good knowledge, 27 respondents (54%) had poor knowledge about risky behavior for transmitting HIV / AIDS. Members of the Youth Organization had the same

agree and disagree attitude, each with 25 people (50%). A total of 26 respondents (52%) had peers who had no influence and 24 respondents (48%) had influential peers. The frequency distribution between good parenting style and poor parenting style was the same (50%). From the total number of samples, 23 respondents or 46% had traumatic experience during their lifetime and 54% (27) respondents did not have a traumatic experience during their lifetime. Most of the respondents had sufficient Media Information Sources, which were 26 people (52%). While 24 people (48%) had lack of Media Information Resources. Some of 33 people (66%) did not have risky behaviors for HIV / AIDs transmission and the rest (34% or 17 people) had.

Table 2. The Characteristics Distribution of Respondent Based on Independent and Dependent Variable

Variable Independent	N	%
<b>1. Knowledge</b>		
lack	27	54.0
sufficient	23	46.0
<b>2. Attitude</b>		
agree	25	50.0
disagree	25	50.0
<b>3. Media Info Sources:</b>		
Sufficient	26	52.0
Lack	24	48.0
<b>3. Peer-influence</b>		
good	26	52.0
poor	24	48.0
<b>4. Parenting style</b>		
poor	25	50.0
good	25	50.0
<b>Traumatic experience</b>		
Yes	23	46.0
No	27	54.0
<b>Variable Dependent</b>		
<b>1. Risky Behaviour</b>		
at risk	17	34.0
no risk	33	66.0

Knowledge variables were grouped into good and poor knowledge respondents. The good knowledge group was distributed as many as 20 people (87.0%) included in the no-risk category, 3 people (13%) were included in at risk category. In the group of respondents with poor knowledge distributed as many as 13 people (48.1%) included in the category of no-risk, 14 people (51.9%) included in the at risk category. Chi-Square test results found a significant relationship between knowledge and risky behaviours of HIV AIDs transmission, with a p value of 0.006 (P value <0.05). This was consistent with was concluded in the study [18] that knowledge was one of the factors that influence a person's attitudes and behavior. Good

knowledge about HIV and AIDS in adolescents was expected to avoid risky behavior for HIV and AIDS transmission. Different types of access to sources of health knowledge also should be used to increase health knowledge scores mainly of the elderly [22].

This was in accordance with the research conclusions [4], that it was good respondents had knowledge about groups at risk of HIV. Deviant behavior was formed due to a negative stimulus that affects an individual so that a response arises in him to do something and manifest it in the form of deviant behavior. Stimulus was formed not because of the will of the individual itself but the influence from outside the individual who causes the individual to respond in the wrong way, causing a distortion [3] (see Table 3 above).

Table 3. Cross Tabulation of Knowledge and HIV/AIDS Risky Behavior

Knowledge	HIV/AIDS risky behavior				Total		95% CI	P Value	OR
	No risk		At risk						
	n	%	N	%	N	%			
lack	13	48.1	14	51.9	27	100	0.43-0.86	0.006	0.191
Sufficient	20	87.0	3	13.0	23	100			

Attitude variables were grouped into respondents who had agreeable and a disagreeable attitude. Amount 68.0 % respondent were in the no-risk category, 8 people (32%) were included in the risk category. In the group of respondents with a disagreeable attitude distributed as many as 16 people (64.0%) fall into the no-risk category, and 9 people (36.0%) included in the risk category. Based on the Chi-Square test results obtained a P value of 0.500 (P value>0.05) it concluded that there was no significant

relationship between attitude and risky behaviors of HIV AIDs transmission. Although analytically not related, study showed that attitudes toward premarital sexual relations in adolescents with nearly half of respondents (49.3 percent) more permissive toward premarital sex. The level of acceptance of premarital intercourse is higher than the findings of previous studies both in the student population, factory workers, or students and adolescents in general [1].

Table 4. Cross Tabulation of Peer-Influence and HIV/AIDS Risky Behaviour

Peer-influence	HIV/AIDS risky behavior				Total		95% CI	<i>P</i> <i>Value</i>	OR
	Safe		At risk						
	N	%	N	%	N	%			
good	22	84.6	4	15.4	26	100	1.71 - 24.68	0.007	6.50
poor	11	45.8	13	54.2	24	100			

There were 22 people (84.6%) in the not affected by Peer Influence group of being in the no-risk category, 4 people (15.4%) were included in the at risk category. In the group of respondent affected by Peer Influences distributed as many as 11 people (45.8%) included in the category not at risk, as many as 13 people (54.2%) included in the at risk category. Chi-Square test results obtained a P value of 0.007 (P value <0.05) there was a significant relationship between Peer Influence and risky behaviour for HIV AIDs transmission. It was similar with result of one research [23] that peers have a direct influence in adolescents risk behaviors.

The relationship with parents did not demonstrate the expected mediation effect, with the exception of the following elements: relation between type of friends and risk behavior; and communication with parent and lesser involvement in violence behaviors and increased well-being. The negative influence of the peer group is more connected to the involvement in risk behaviors, whilst the positive influence is more connected with protective behaviors.

On this peer Influence variable, there was a significant relationship between peer influence and risky behavior for HIV AIDs transmission, although the majority of peers said

that their peers had no affected on their lives (52%) (See Table 4 above). Information Sources variable were grouped into respondents who had lack Information Sources and sufficient Information Sources. The group that had lack Information Sources were distributed by 15 people (57.0%) included in the no-risk category, as many as 11 people (42.3%) were included in the at risk category. In the group of respondents who had sufficient Information Sources distributed 18 people (75.0%) included in the category of not at risk, as many as 6 people (25.0%) included in the risk category.

The Chi-Square test results obtained a P value of 0.161 (P value> 0.05), concluded that there was no significant relationship between the Information Sources and risk behaviors of transmitting HIV AIDs. Sources of information obtained by respondents about HIV AIDs were from Teachers, Parents, Health Workers, Friends, Newspapers, Magazines, TV, Radio and internet. Not with the kind of sources, students of University of Dubai ultimately, due to cultural effects adopts different searching processes, use different phrases and mostly spend more time to search for information to satisfy their needs. It is assumed that poor information skills are preventing from searching effectively [24]

Table 5. Cross Tabulation of Parenting-Style and HIV/AIDS Risky Behaviour

Parenting style	HIV/AIDS risky behavior				Total		95% CI	P Value	OR
	Safe		At risk						
	N	%	N	%	N	%			
poor	12	48.0	13	52.0	25	100	0.02 - 0.96	0.016	0.15
good	21	84.0	4	16.0	25	100			

Parenting style Variable were grouped into respondents who had a poor had a good Parenting style. The group that had a poor parenting style was distributed as many as 12 people (48.0%) in the no-risk category, as many as 13 people (52.0%) were included in the risk category. In the group of respondents who had a good Parenting style distributed as many as 21 people (84.0%) included in the category of not at risk, as many as 4 people (16.0%) included in the risk category. Chi-Square test results obtained a P value of 0.016 (P value <0.05), there was a significant relationship between Parenting style and risky behavior of transmitting HIV AIDs. (See Table 5 above). In the report of one research it said as much as 52.2% of respondents felt that they received less agent for cultural transmission [15].

The role of the family for Indonesian youth today was not as strong as before because the value of other reference groups also provides alternative values besides the values introduced by their parents. The Traumatic Experience Variables were grouped into respondents with Traumatic

Experiences and those who did not have one. In the No Traumatic Experience group there were 22 people (81.5%) distributed in the no-risk category, while 5 people (18.5%) were included in the at risk category. In the group of respondents who had Traumatic Experience, there were 11 people (47.8%) distributed in the no-risk category 12 people (52.2%) were included in the risk category. Chi-Square test results obtained a P value of 0.017 (P value <0.05) it can be concluded that there was a significant relationship between Traumatic Experience and risky behaviors of transmitting HIV AIDs (See TABLE VI below). Most respondents had a traumatic experience during their lifetime (54%). Traumatic events were associated with a threefold increased odds of subsequent first onset of psychotic experiences. There was a dose-response relationship between higher numbers of traumatic event types and odds of psychotic experiences, but comorbid mental disorders (including PTSD) did not account for the associations of traumatic events with psychotic experiences [10].

Table 6. Cross Tabulation of Traumatic Experience and HIV/AIDS and Risky Behaviour

Traumatic experience	HIV/AIDS risky behavior				Total		95% CI	<i>P Value</i>	OR
	Safe		At risk						
	N	%	N	%	N	%			
No	22	81.5	5	18.5	27	100	1.64-91.04	0.017	12.20
Yes	11	47.8	12	52.2	23	100			

Logistic Regression test results on respondent characteristic variables and HIV / AIDS Risky Behavior Transmission. It was indicates that HIV/AIDS risky behavior increased by lack of knowledge (OR= 0.19; 95% CI=0.43 to 0.86; p=0.006), poor parenting style (OR= 0.15; 95% CI=0.02 to

0.96 ;p=0.016), traumatic experience (OR=12.20; 95% CI=1.64 to 91.04; p=0.017), and poor peer-influence (OR=6.50; 95% CI=1.71 to 24.68; p=0.007) (See Table 7 for logistic regression)

Table 7. The Result of Multiple Logistic Regression

Independent Variables	OR	CI 95%		P value
		Lower limit	Upper limit	
Lack of knowledge	0.19	0.43	0.86	0.006
Poor parenting style	0.15	0.02	0.96	0.016
Traumatic experience	12.20	1.64	91.04	0.017
Poor peer-influence	6.50	1.71	24.68	0.007

## 4. CONCLUSION

1. Characteristics of respondents had been recorded. The majority of women (62%) were present, the most respondents who present at the age of 21-40 years were 20% and the most present were students (12%) and workers (32%).

2. A number of 27 respondents (54%) had poor knowledge about risky behavior, members who present had the same

agree and disagree attitude, frequency distribution between good and poor parenting style was the same, and majority of the respondents (54%) did not have a traumatic experience during their lifetime. A total of 52% respondents had peers who had no influence, and most of the respondents had sufficient media information sources

3. There was a significant relationship between knowledge, poor parenting style, traumatic experience and peer influence and Risky behaviors for transmitting HIV / AIDs.

4. Risky behaviors for transmitting HIV / AIDs increases by lack of knowledge, poor parenting style, traumatic experience, and poor peer-group influence in the Youth Organization Group in the work area of the Gandul, Cinere City of Depok, West Java.

## REFERENCES

- [1]. Bappeda Depok 2018, FGD Tentang Perilaku Penyimpangan Seksual di Depok, Depok, diakses pada Juni 2019 <http://bappeda.depok.go.id/berita-fgd-tentang-perilaku-penyimpangan-seksual-di-kota-depok.html>
- [2]. Baliyah 2016, Hubungan Sikap Teman Sebaya tentang LGBT dengan Stigma LGBT pada Mahasiswa Semester 4 Prodi DIV Kebidanan di Universitas 'Aisyiyah Yogyakarta, diakses Juni 2019 <https://digilib.unisayogya.ac.id/2181/>
- [3]. Boeree, CG 2007, Personality Theory, SIGMUND FREUD (1856-1939), acquired from <http://webspace.ship.edu/cgboeree/freud.html>
- [4]. Desy Indra Yani, Neti Juniarti, Mamat Lukman, 2017. Gambaran Pengetahuan dan Sikap tentang HIV/ AIDS Pada Remaja di Pangandaran, Jurnal Pengabdian Kepada Masyarakat Vol. 1, No. 1, Februari 2017: 1 - 5 ISSN 1410 - 5675 G, 5.
- [5]. Dic, (2017). "174 pelaku LGBT Kena HIV", Radar Depok, June 2017 [online], Available at: <https://radardepok.com/2017/06/174-pelaku-lgbt-kena-hiv/> (Accessed: SUNDAY DESEMBER 15, 2019)
- [6]. Fadhilah, A 2018, Faktor-faktor Kecenderungan Orientasi Seksual Sejenis pada Remaja di Kota Malang, diakses Juni 2019 <https://etheses.uin-malang.ac.id/11953>
- [7]. Komisi penanggulangan AIDS 2010-2011, Pengertian dan Pencegahan HIV/AIDS, Artikel info HIV/AIDS, diakses 26 Januari 2018, <http://www.aidsindonesia.or.id/dasar-hiv-aids> available at <https://megapolitan.kompas.com/read/2018/11/19/17555411/penderita-hivaid-di-depok-tercatat-340-orang>.
- [8]. Laporan perkembangan HIV AIDs dan Infeksi Menular Seksual (IMS) triwulan IV 2017. Visited this page on 2/16/19.
- [9]. Laporan Kesehatan Kota Depok, 2016;
- [10]. McGrath, JJ, et al, 2017. Trauma and psychotic experiences: transnational data from the World Mental Health Survey, THE BRITISH JOURNAL OF PSYCHIATRY, Br J Psychiatry. 2017 Dec; 211(6): 373–380.
- [11]. Nisa, K 2018, 'Hubungan Pola Asuh Orang Tua, Teman Sebaya dan Pengetahuan dengan Persepsi Remaja tentang Lesbian, Gay, Bisexual dan Transgender (LGBT) di MAN 02 Kota Semarang', diakses Juni 2019 <https://repository.unimus.ac.id/2447/>
- [12]. Notoatmojo, S 2014, Perilaku Kesehatan, Edisi Revisi cetakan kedua, Rineka Cipta, Jakarta
- [13]. Nur, K; Astri, H, (2010). Hubungan Pengetahuan dengan perilaku pencegahan penularan HIV/AIDS pada PSK (Pekerja Seks Komerisal) Di Pasar Kembang Yogyakarta.
- [14]. Pedoman Manajemen Program Pencegahan Penularan HIV dan Sifilis dari Ibu ke Anak, Penelitian%20Kolaborasi/Pedoman\_Manajem en\_PPIApdf\_kemenkes.pdf
- [15]. Reiss, David, 2005. The Interplay between genotypes and family Relationships: Reframing Concepts of Development and Prevention. Current Directions in Psychological Science. Vol.14.no 3 (Jun., 2005), pp.139-143. JSTOR.
- [16]. Saputra, G, 2008. Gambaran pengetahuan, sikap dan perilaku terkait HIV AIDs pada siswa kelas 3 SMA PGRI 1 Kota Bogor tahun 2008. FKM UI, Desember, 2008.
- [17]. Suprajitno 2004, Asuhan Keperawatan Keluarga 1st edn, Jakata, Penerbit Buku Kedokteran EGC

- [18]. Sudikno, Bona Simanungkalit, Siswanto; 2011. pp 145-153. Teenagers' Knowledge on HIV and AIDS in Indonesia (Basic Health Research Analyses 2010). *Jurnal Kesehatan Reproduksi* Vol. 1 No 3, Agustus 2011: 151
- [19]. Widyastuti, E.S.A, 2009. Personal dan sosial yang mempengaruhi sikap remaja terhadap hubungan seks pranikah. *Jurnal Promosi Kesehatan Indonesia* Vol. 4 / No. 2 /Agustus 2009, 78-79
- [21]. Akses Layanan Meningkatkan, ASEAN Berhasil Turunkan Infeksi HIV, Dipublikasikan Pada: Jumat, 11 Oktober 2019 00:00:00, diakses pada 26-10-2019,
- [22]. Zhifei He, Zhaohui Cheng, Tian Shao, Chunyan Liu, Piaopiao Shao, Ghose Bishwajit, Da Feng, and Zhanchun Feng, 2016. Factors Influencing Health Knowledge and Behaviors among the Elderly in Rural China. *Int J Environ Res Public Health*. 2016 Oct; 13(10): 975. Published online 2016 Sep 30. doi: 10.3390/ijerph13100975.
- [23]. Gina Tomé, Margarida Gaspar de Matos, PhD, Celeste Simões, PhD, Inês Camacho, PhD, and José AlvesDiniz, PhD, 2012. How Can Peer Group Influence the Behavior of Adolescents: Explanatory Model. *Glob J Health Sci*. 2012 Mar; 4(2): 26–35. Published online 2012 Mar 1. doi: 10.5539/gjhs.v4n2p26.
- [24]. Ali Amour El-Maamiry, 2017. The Information- Seeking Behaviour of Students: A Case of University of Dubai. Volume 17 Issue 1 Version 1.0 Year 2017 *Global Journal of Computer Science and Technology: Information & Technology*. Online ISSN: 0975-4172 & Print ISSN: 0975-4350.