

# INTERNATIONAL NURSING CONFERENCE "Education, Practice And Research Development In Nursing"

In Collaboration With:

The Proceeding of The 8<sup>th</sup> International Nursing Conference "Kahuripan Room, Management Building C Campus Universitas Airlangga" 8<sup>th</sup>- 9<sup>th</sup>April 2017

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The Proceeding of 8<sup>th</sup> International Nursing Conference: Education, Practice and Research Development In Nursing

Fakultas Keperawatan Universitas Airlangga



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#### **GREETING FROM STEERING COMMITTEE**

Assalamualaikum Warahmatullahi Wabarakatuh

Honorable Rector of Universitas Airlangga Honorable Dean of Faculty of Nursing, Universitas Airlangga Honorable Dirjen Sumber Daya Iptek Dikti Honorable Head of Co-Host Institutions Distinguished Speakers and all Participants

Praise the presence of God Almighty, for his mercy so that Faculty of Nursing Airlangga University can organized: The 8<sup>th</sup> International Nursing Conference on the theme of "Education, Practice And Research Development In Nursing". Welcome in Surabaya, City of Heroes Indonesia.

This international nursing conference is conducted in cooperation with 6 nursing schools throughout the nation. These institutions including, Poltekkes Kementerian Kesehatan Surakarta, STIKES Ngudia Husada Bangkalan, STIKES Pemerintah Kabupaten Jombang, STIKES Maharani Malang, Poltekkes Kementerian Kesehatan Surabaya, and STIKES YARSI Mataram. The Faculty of Nursing Universitas Airlangga once more aims to elaborate with the aforementioned institutions and international universities through holding an international nursing conference. The international universities include: Flinders University\* (Australia), La trobe University (Australia), University of Collegue Cork (Irlandia), University of Malaya (Malaysia), and Kaohshiung Medical University (Taiwan). We also invited Prof. dr. Ali Gufron Mukti, M.Sc., Ph. D. Dirjen Sumber Daya Iptek Dikti, as a keynote speaker.

Proceeding of this International Nursing Conference will be publish at Atlantis Press. The selected papers will be submit at Journal Ners or index by Conference Proceeding Citation Index, Thomson Reuters.

Participants of this conference are lecturers, nurses, students both from clinical and educational setting, regional and overseas area.

Finally, I would like to thanks to all speakers, participants, and sponsors so that this conference can be held successfully.

Please enjoy the international conference, I hope we all have a wonderful time at the conference.

Wassalamualaikum Warahmatullahi Wabarakatuh

**Steering Committee** 

### OPENING REMARK FROM THE DEAN OF FACULTY NURSING

#### Assalamualaikum Warahmatullahi Wabarakatuh

Honorable Rector of Universitas Airlangga Distinguished speakers and all Participants

First of all, I would like to praises and thanks to God for the blessing and giving us the grace to be here in a good health and can hold this conference together. Secondly, it is a great privilege and honor for us to welcome every one and thank you very much for your participation and support for the 8<sup>th</sup> International Nursing "Education, Practice and Research Development in Nursing".

Research and education into practice is very important to enhance nursing competencies with nurse colleagues in the international sphere. Indonesia face problems such low frequency of nursing conference, number of researches, also international publications. This problem can hinder quality improvement of nursing services.

The demand of health care services including nursing care will increase continously not only the quality but also the affordability and the service coverage. Facing this society's demands, particularly in the field of nursing, we should make a change in various aspects such as in nursing education, nursing practice and nursing research. The science of nursing has philosophy and nursing paradigm that underlying the various aspects to improve professional in education, practice, and nursing research. As a science, nursing can grow continously through research and education.

The interaction among education, practice, and nursing research are interrelated and affect the development of science in nursing. Nursing practice has interactions with nursing education and research. Practice can be used as a source of nursing phenomena that occurs, so it can become a nursing model in accordance with the theory developed in education and has been proven through nursing research. In addition, nursing research become a substance of the development of nursing science, because of through nursing research may prove the theory which developed in education so it is useful and can be practiced in the health service. So, it can be concluded that education, nursing practice and research have interaction each other that cannot be separated.

Along with Universitas Airlangga vision to become a world class university and enter top World University Ranking, Faculty of Nursing, participates actively in reaching the vision. To achieve World Class University ranking, faculty needs to meet the standards of World's top Universities such as Academic reputation, employer reputation, publication, faculty standard ratio, international students and exchange. International Nursing Conference is one of the few strategies that have been implemented by the faculty to increase Publication standard.

Finally, I would like to thanks to all speakers, participants, and sponsorships that helped the success of this event. **I hope** that this conference having good contribution in increasing the quality of nursing and nursing care.

Please enjoy the international conference. I hope, we all have a wonderful time at the conference.

Wassalamualaikum Warahmatullahi Wabarakatuh

Prof. Dr. Nursalam, M.Nurs (Hons) Dean, Faculty of Nursing Universitas Airlangga

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#### OPENING SPEECH FROM THE RECTOR OF UNIVERSITAS AIRLANGGA

#### Assalamu'alaikum wa-rahmatullahi wa-barakatuh.

#### May the peace, mercy and blessings of Allah be upon you.

Alhamdulillah! Praise be to Allah, The Almighty for giving us the opportunity to gather here in "THE 8<sup>TH</sup> INTERNATIONAL NURSING CONFERENCE & WORKSHOP". Let us also send *shalawat* and *salam* to our Prophet Muhammad SAW (Praise Be Upon Him): *Allaahumma shalli 'alaa Muhammad wa 'alaa aali Muhammad*. May Allah give mercy and blessings upon Him.

#### Ladies and gentlemen,

Nursing is a dynamic science and profession. It can be seen from the relentless efforts made to optimize either the scientific or practical aspects of Nursing. These efforts towards excellence are absolutely needed.

Innovations in providing nursing care are possible to be introduced through education, practice and research. In this regard, we believe that those innovations are from "new concepts" formulated in the field of Nursing to provide the best service. If we can do this, there will be more benefits we can get such as gaining reputation for nursing profession and the education institution.

#### Ladies and gentlemen,

Higher education of Nursing has a strategic role towards excellent healthcare service. Therefore, the education format should be ready anticipating any developments. This readiness is needed to accelerate the realization of "Healthy Global Citizen".

So, let us exploit these changes around us, and consider this improving healthcare service as our success towards welfare. Let us always be consistent to improve quality in the field of Nursing. This field of science is expected to respond and voice concern about all aspects of healthcare service development in any communities.

At this point, the organization of "THE 8<sup>TH</sup> INTERNATIONAL NURSING CONFERENCE & WORKSHOP" and "The Education, Practice and Research Development in Nursing" as the theme is important. We cannot deny that through education, practice and research implemented seriously, we will get valuable findings for Nursing science development.

In education, students' questions can start new discourses towards Nursing science development. In its practice, various problems and solutions found in the field will broaden the scientific scope of Nursing. In research, through this activity we are developing the science in a well-planned and scientific manner.

Therefore, let us use this wonderful occasion to present research findings, either from the education, practice and research. We believe that this event will take on the challenges in providing quality healthcare service in the society.

#### Ladies and gentlemen,

Finally, I would like to express my gratitude to the committee, all nursing education institutions, either domestic or overseas, for participating in this event, and other people contributing to make this event a success. May everything run well and every objective achieved. Have a great conference and workshop. Good luck!

Wassalamu'alaikum wa-rahmatullahi wa-barakatuh.

Rector of Universitas Airlangga, **Prof. Dr. Moh. Nasih, SE., MT., Ak., CMA.** NIP. 196508061992031002

# STEERING COMMITTEE

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## TIME SCHEDULE 8<sup>TH</sup> INTERNATIONAL NURSING CONFERENCE "EDUCATION, PRACTICE AND RESEARCH DEVELOPMENT IN NURSING" Surabaya, 8-9 April 2017

DAY 1, 3	SATURDAY 8 <sup>th</sup> April 2017		
TIME	ACTIVITY		VENUE
07.00 - 07.45	Open Registration	Committee	
07.45 - 08.00	Opening Remarks	MC:	
	- Indonesia Raya: National Anthem	Nadia & Hakim	
	- Hymn Airlangga	NEVO	
08.00 - 09.00	Keynote Speaker	MC	
	Prof. dr. Ali Ghufron Mukti, M.Sc., Ph.D.		
	(Ministry of Research and Higher Education		
	Republic Indonesia)		Kahuripan 300
	"The Policy on Nurses and Health Worker		Management
	Research-Based Development"		Building,
09.00 - 09.10	Certificate Conferment & Giving Souvenir	Dean/Rector	Unair Kampus
09.10 - 09.50	- Welcoming Show (Traditional Dance): Tari	Dance Team	C
	Jejer - Speech from Steering Committee	Prof Nur, Bu	
	<ul> <li>Speech from Dean of The Faculty of Nursing,</li> </ul>	Elida, Rektor,	
	Universitas Airlangga	Enda, MCKtor,	
	- Speech from Rector Universitas Airlangga		
	- Opening ceremony: Hit the Gong	Pak Mahfud	
	- Pray	I un munituu	
09.50 - 10.00	Coffee Break and Opening Poster Presentation	МС	-
Plenary Session			
10.00 - 10.20	Speaker 1	Moderator:	
	Dr. Chong Mei Chan	RR Dian T,	
	University of Malaya	S.Kep., Ns.,	
	"Geriatric Nursing Care: Trends and Issues"	M.Kep	
10.20-10.40	Speaker 2		
	Ya-Ping Yang, Ph.D	Notulen:	
	Kaohsiung Medical University	Sylvia Dwi	
	"Alternative therapies for People with Dementia"	Wahyuni	Kahuripan 300
10.40 - 11.10	Speaker 3		Management
	Dr. Joni Haryanto, S.Kp., M.Si	Operator:	Building,
	Universitas Airlangga	Candra Panji A	Unair Kampus
	"Spiritual Ceki Card Game to Increase Cognitive		C
	Function and Reduction of Frontotemporal		
11.10 11.00	Dementia Symptoms on Elderly"		
11.10 - 11.30	Plenary Discussion	<b></b>	
	Certificate Conferment	Chairman/Vice	
		Dean	4
11.30 - 12.30	Poster Presentation 1	Committee	
	Lunch Break	Committee	
Plenary Session			
12.30 - 12.50	Speaker 4	Moderator:	Kahuripan 300

TIME	ACTIVITY		VENUE
	Pauline Hill, RN, Dipp.App.Sc(Nsg), BN(Ed),	Ika Nur Pratiwi,	Management
	MEd(St), PhD	S.Kep., Ns.,	Build,
	Flinders University	M.Kep	Unair Kampus
	"Practice Development: Supporting Students at	Ĩ	C
	The Bed Side"	Notulen:	
12.50 - 13.10	Speaker 5	Iqlima Dwi K	
	Sonia Reisenhofer, RN, BN, Postgrad Dip,		
	(Emergency Nursing), MCN	<b>Operator:</b>	
	La Trobe University	Deni Yasmara	
	"Mental Health & Gender Issues: Trends in		
	Research and Practice"		
13.10 - 13.30	Speaker 6		
	Dr. Esty Yunitasari, S.Kp., M.Kes		
	Universitas Airlangga		
	"Optimization of Family Support in Improving		
	Resilience of Cervical Cancer Client Post Radical		
	<i>Hysterectomy+Bilateral</i> Salpingooophorectomy		
	which is Getting Chemotherapy"		
13.30 - 13.50	Speaker 7		
	Dr. Sestu Retno DA, S.Kp., M.Kes.		
	Stikes Pemkab Jombang		
	"Role Provider in Increasing Early Initiation of		
	Breastfeeding Coverage to Mother Post Sectio		
	Cesarea in Indonesia"		
13.50 - 14.30	Plenary Discussion	Moderator	
	Certificate Conferment	Vice Dean	
14.30 - 15.00	Coffee Break and Prayer	Committee	
Plenary Session		Γ	Γ
15.00 - 15.20	Speaker 8	Moderator:	
	Proffesor Eileen Savage BNS., MSc, PhD.	Setho Hadi S,	
	University College Cork, Irlandia	S.Kep., Ns.,	
	"Enabling Primary Care Services toward	M.NS	
	Integrated Care for Chronic Disease Prevention	(CommHlth&PC	
	and Management"	)	
15.20 - 15.35	Speaker 9		
	Ferry Effendi, S.Kep., Ns., M.Sc., PhD.	Notulen:	
	Universitas Airlangga	Lailatun Ni'mah	
	"Indonesian Nurses Migration under Bilateral	0	
15.25 15.50	Agreement: Policy Issues and Responses"	Operator:	
15.35 - 15.50	Speaker 10 Dr. Siti Nur Khalifah, M.Kan, Sr. Karr	Candra Panji A	
	Dr. Siti Nur Kholifah, M.Kep., Sp.Kom.		
	Poltekes Kemenkes Surabaya		
	"Interpersonal Interaction with Family-Nurse in		
	Improving The Performance of Public Health		
15.50 16.05	Nurse"		
15.50 - 16.05	Speaker 11 Eva Agustina Valostvarini S.Kan, Ng. M.Kan		
	Eva Agustina Yalestyorini, S.Kep., Ns., M.Kep		
	STIKES Surya Mitra Husada		

TIME	ACTIVITY		VENUE
	"Relationship between Dietary Habits and		
	Menstrual Pattern with Anemia of Adolescent"		
16.05 - 16.30	Plenary Discussion		
	Certificate Conferment	Vice Dean	
16.30 - 16.45	Closing Day 1	MC	

# DAY 2, SUNDAY 9th April 2017

TIME	ACTIVITY		VENUE
07.00 - 08.00	Open Registration	Committee	Kahuripan 300
08.00 - 08.30	<b>Opening Ceremony : NEVO Choir</b>	МС	Management
	<b>Performance</b> (Gebyar-Gebyar & Heal the Word)	Nadia & Hakim	Build,
		NEVO	Unair Kampus C
<b>Plenary Session</b>	IV		
08.30 - 08.45	Speaker 12	Moderator:	
	Bill Mc.Guiness, RN, Dip T, B Ed, MNS, Ph.D,	Ira Suarilah,	
	FAWMA	S.Kep., Ns.,	
	La Trobe University	M.Sc	
	"Pressure Ulcer Updates"		
08.45 - 09.00	Speaker 13	Notulen:	
	Prof. Dr. Nursalam, M.Nurs (Hons)	Lingga Curnia	
	Universitas Airlangga	Dewi	
	"Family Experience In Caring For HIV Positive-		
	Indonesian Migrant Workers: A	Operator:	
	Phenomenological Study"	RR Dian T	Kahuripan 300
09.00 - 09.15	Speaker 14		Management
	Ninuk Dian Kurniawati, S.Kep., Ns., MANP		Building,
	Universitas Airlangga		Unair Kampus C
	"Mind-Body-Spiritual Nursing Care in Intensive		
00.15 00.20	Care Unit"		
09.15 - 09.30	Speaker 15		
	Dr. Kusnanto, S.Kp., M.Kes		
	Universitas Airlangga "The Effect of Implementation of Theory of		
	"The Effect of Implementation of Theory of Reasoned Action against Clients with Type 2		
	Reasoned Action against Clients with Type 2 Diabetic Mellitus Diet Adherence and Physical		
	Activity"		
09.30 - 10.00	Plenary Discussion		
07.50 10.00	Certificate Conferment	Vice Dean	
10.00 - 10.15	Coffee Break	Committee	
Plenary Session			
10.15 - 10.40	Speaker 16	Moderator:	
	Dr. Linda Sweet	Tiyas	Kalaania 200
	Flinders University	Kusumaningrum,	Kahuripan 300
	"Enhancing Clinical Learning- Before, During,	S.Kep., Ns.,	Management
	After"	M.Kep	Building,
10.40 - 11.00	Speaker 17	-	Unair Kampus C
	Dr. Kristen Graham	Notulen:	

TIME	ACTIVITY		VENUE
	Flinders University	Aria Aulia N	
	"Using Simulation to Enhance Student		
	Learning"	<b>Operator:</b>	
11.00 - 11.30	Plenary Discussion	RR Dian T	
	Certificate Conferment	Vice Dean	
11.30 - 12.00	Doorprize Session I	MC	
12.00 - 13.00	Lunch Break	Committee	
13.00 - 14.00	Oral Presentation 1 (30 oral)	Committee	Kahuripan Room
14.00 - 15.00	Oral Presentation 2 (30 oral)	Committee	Kahuripan Room
15.00 - 16.00	Oral Presentation 3 (30 oral)	Committee	Kahuripan Room
16.00 - 16.30	<b>Doorprize Session 2 + announce best oral and</b>	MC	Kahuripan Room
	poster presentator		
16.30 - 17.00	Closing Remark	MC	Kahuripan Room
			300

# The Effect of HIV-Related Knowledge on the Willingnes to Participate in Voluntary Counseling and Testing (VCT) Among Nursing Students

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Abstract-Introduction: Youth aged 15-24 years old have the high vulnerability to HIV infection. Students who lack parental supervision have more opportunity to try new things including sexual matter. Nursing students frequently provide care for several patients who unaware of their HIV status. These increases the students' HIV susceptibility. This study aims to analyze the effect of HIVrelated knowledge on the willingness to participate in VCT among nursing students. Method: This is a cross-sectional study involving 137 nursing students in a university in Surabaya. Sample chose by random sampling. Instruments used were questionnaires of KQ-18 and general attitude to VCT. Data analysis used regression test with  $\alpha \leq 0.05$ . Result: Most respondents were females, 20 years old, single, living with parents. They got HIV health education more than twice so far and mostly got information about HIV in the seminar. Most respondents have low HIVrelated knowledge but willing enough to participate in VCT. HIV-related knowledge only influences the willingness to participate in VCT of 0.2%, while the other 99.8% influences are caused by the other unidentified factors. The regression model was not significant (p = 0.632). Conclusion: HIV-related knowledge has a very slight influence on the willingness to participate in VCT among nursing students.

Keywords: HIV, VCT, knowledge, willingness, nursing student.

#### I. INTRODUCTION

The young generation of both men and women aged 15-24 years are particularly vulnerable to HIV infection because young people/teenagers are in the experimental phase of everything including in sexual matters [1]. Students are highly vulnerable to HIV infection due to lack of knowledge and lack of parental supervision, especially university students who live far away from their parents, thus giving them more opportunity to try new things, including sex experience [2]. Based on data of basic health research from Ministry of Health (MOH) of Indonesia Republic (RI) in 2012, only 13% of young/teenage girls and 12% of young/teenage boys who have

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a comprehensive knowledge about HIV/AIDS, while the Millennium Development Goals (MDGs) for the knowledge of young people is 95% [3].

Surveys conducted by MOH of RI and the Commission of Acquired Immunodeficiency Syndrome (AIDS) of RI in Central Java revealed that nearly 40% of AIDS cases are found in patients aged 20-29 years, which means that they are infected by the age of 15-24 years (MOH of RI, 2014; Central Java AIDS Commission, 2014). Data of General Directorate of PP and PL (2014) shows that from April 1<sup>st</sup>, 1987 to September 30<sup>th</sup>, 2014, there were 150,296 cases of HIV and 55,799 cases of AIDS, with the number of patients who died from HIV / AIDS amounted to 9,796 people. The number of HIV / AIDS cases in adolescents and young adults aged 15-29 years as many as 20,069 cases. East Java holds the second rank by number as many as 19,249 cases of HIV and 8,976 cases of AIDS [4].

UNAIDS statistics in 2011 revealed that 36.9 million people were living with HIV, 2 million new patients were infected, and 1.2 thousand people died from HIV/AIDS throughout the world. Indonesia still faces a growing HIV epidemic. Data from October to December 2011 reported 5,442 HIV cases and 2,357 AIDS cases. Cumulatively since 1987 up to 2011, there were 21,031 patients with HIV; 7,312 patients with AIDS and 1,139 patients who died from HIV/ AIDS. East Java is at the second position with the number of people infected with HIV as many as 9,950 people and 4,598 people with AIDS, with prevalence rate 12:27/100,000 population. The number of children and adolescents (<1 year to 19 years old) who are living with HIV as many as 1,929 people since 1987 up to 2011 [5].

Understanding the mechanism of HIV transmission is the first step in the process of controlling HIV infection. VCT, Initiating Provider Test and Counseling (PITC) and Homebased HIV Counseling and Testing (HBCT) are means by people aware of their HIV status. VCT is one effective method for reducing and controlling the transmission of HIV. VCT is an entry point for patients to get preventive programs, treatment and other comprehensive programs to prevent HIV infection. Research conducted by the World Health Organization revealed that the number of people who participate in VCT is very low in countries with high HIV/AIDS cases; it is only 5% of people living with HIV / AIDS in the world.

WHO interventions focused on several key areas such as testing and counseling which is the entrance to the stage of prevention and treatment [6]. Counseling in VCT is designed to assist patients in interpreting the results of laboratory tests, to change the behavior so new people do not become infected and also prevent transmission from HIV patients to other people [7]. The main target of the Indonesia national strategy for reproductive health and sex education is to increase the knowledge of young people about reproductive health and safe sex in order to promote and facilitate their behavior changes; including increased awareness of respect for others, and the next target is to give young people the knowledge, skills and motivation to behave well, especially related to reproductive health [8]. To achieve the main targets of this national strategy, education on HIV/AIDS should be a compulsory subject or study material for all majors or courses of study in colleges/universities.

Nursing students are the future professional nurses who will give high-quality care to their patients, including HIV-AIDS. In the study process, they will also give nursing care to various patients who are mostly unaware of their HIV status. The high possibility of nursing students to be infected by HIV has made the high importance of HIV-related knowledge since the beginning of their study. Many studies showed that knowledge about HIV correlates with the willingness to participate in VCT. This study aims to analyze the effect of HIV-related knowledge on the willingness to participate in VCT among nursing students.

#### II. RESEARCH METHODS

This study used cross-sectional design and Health Belief Model as the theoretical framework. In the context of this study, researchers conducted a health survey in Faculty of Nursing (FON) of one university in Surabaya. The population was all students of that FON (N = 157, in the academic year of 2016/2017). The sample size was 137 students were chosen by simple random sampling. Sample's inclusion criteria were being the active student in the  $2^{nd}$  semester of the academic year and adult (18-23 years old). The exclusion criteria were rejecting to give signature in the informed consent, incompletely filling the questionnaires, collecting the questionnaires late. Independent variable was HIV-related knowledge while dependent variable was the willingness to participate in VCT.

The instrument of the KQ-18 questionnaire developed by [9] was used for assessing the independent variable: HIV-related knowledge. In the beginning, this instrument consisted of 45 items which developed by Carey, Morrison-Beedy, and Johnson (1977). [9] then choose 18 items from a total of 45 items. This instrument then subsequently named KQ-18. The possible answers were only true, false and no idea. Each true answer was given 5.5 points. The category of HIV-related knowledge was high (score 75-100), sufficient (score 50-74.5) and low (score 0-49.5).

Results of the prior study for testing this instrument to 42 nursing students in different university showed only four valid items with r = -0.333 - 0.336 and has a moderate reliability with  $\alpha = 0.588$ . Researchers decided to use the 18 items in this study because the least amount of valid items referred to the lack of knowledge about HIV among nursing students.

The instrument of General Attitudes to VCT was used for assessing the dependent variable: the willingness to participate in VCT. This instrument was modified from similar instruments that were originally developed[7]. At first, this instrument consists of 41 items with Likert scale format. This instrument examines five determinants of attitudes towards HIV testing to be indicative of people willing to take the test, namely: 1) the public and self-perception, 2) the assumption of friends, 3) the value of HIV testing, 4) support and confidentiality, and 5) perceived vulnerability. After going through the instrument testing process in Kenya, it is known that there are nine invalid items. This result created a concise form of General Attitudes to VCT questionnaire consisting of 32 items only. The possible answers disagreed (score 1), disagree (score 2), relatively agree (score 3), agree enough (score 4) and strongly agree (score 5). The category of the willingness to participate in VCT was very willing (score 118-160), willing enough (score 75-117) and less willing (score 32-74). Results of the prior study for testing this instrument to 42 nursing students in different university showed only 18 items valid with r = 0.295 - 0.671 and has high reliability with  $\alpha = 0.728$ . The researcher decided to use the 32 items because the invalid items were still needed to get a general picture of the nursing students' willingness to participate in VCT.

The ethical clearance was issued by the Ethical Committee of Faculty of Nursing, Airlangga University, Indonesia. Other ethical aspects included informed consent, anonymity, and confidentiality. Before filling out the questionnaire, the researchers gave study explanation and asked for respondents' signature in informed consent sheet. The collected data then grouped and analyzed using regression test ( $\alpha < 0.05$ ) to determine the effect of HIV-related knowledge on the willingness to participate in VCT among nursing students.

III. RESULT

The study respondents were 137 nursing students. Table 1 below shows the

Characteristic	Frequency (n=137)	Percentage (%) (n=137)
1. Age		
a. 18 years old	11	8.03
b. 19 years old	26	18.98
c. 20 years old	38	27.74
d. 21 years old	37	27.01
e. 22 years old	17	12.41
f. 23 years old	8	5.84
2. Gender		
a. Female	112	81.75
b. Male	25	18.25
3. Marital Status		
a. Married	2	1.46
b. Single	107	78.10



c. In a	28	20.44
relationship	28	20.44
4. Religion		
a. Hinduism	3	2.19
b. Islam	40	29.20
c. Catholic	60	43.80
d. Christian	34	24.82
5. Ethnicity		
a. Javanese	61	44.53
b. Chinese	2	1.46
c. Flores	19	13.87
d. Dayak	7	5.11
e. Batak	4	2.92
f. Timor	7	5.11
g. Sumba	7	5.11
h. Ambon	6	4.38
i. Others	24	17.52
6. Students Level	47	24.21
a. Freshman	47	34.31
b. 2 <sup>nd</sup> year c. 3 <sup>rd</sup> year	37	27.01
c. $3^{th}$ year d. $4^{th}$ year	27 26	19.71
2	20	18.98
7. High School (HS)-	42	30.66
graduated from a. HS in	42 23	16.79
a. HS III Surabaya	23	10.79
b. HS in East		
Java		
c. HS in Java	2	1.46
d. HS outside	70	51.09
Java	70	51.07
8. Living with		
a. Parents	52	37.96
b. Alone	38	27.74
c. Friends	20	14.59
d. Siblings	5	3.65
e. Spouse	1	0.73
f. Extended	21	15.33
family		
9. Housing		
Ownership	49	35.77
a. Owner	1	0.73
(parents)	68	49.64
b. Governmental	19	13.87
c. Monthly-rent		
d. Yearly-rent		
10. Parents' Monthly		
Income (IDR)	2	1.46
a. No income	6	4.38
b. Less than 1	91	66.42
million	25	18.23
c. $1 - 3$ million	13	9.49
d. $3-5$ million		
e. More than 5		
million		
11. Exposed to		
HIV/AIDS Health	9	6.57
Education	41	29.93
a. Never	87	63.50
b. Once		
c. Twice or more		
12. Media of		
		7 20
<b>Information</b> a. Television	10 13	7.30 9.49

b. Book/journal/	58	42.34
printed media	43	32.12
c. Seminar /	49	35.77
workshop	2	1.46
d. Health	36	26.28
education from	7	5.11
healthcare professional	20	14.60
e. College study	1	0.73
material	2	1.46
f. Church		
activity		
g. Social media		
(internet)		
h. Friends		
i. Teacher /		
school		
j. Family		
k. Others		

Table 1 shows that most respondents were females, 20 years old, single, freshman, Catholic, Javanese, high school graduated from outside Java island and still living with parents currently, have gotten HIV health education more than twice so far and got information about HIV mostly from seminar/workshop event.

Table 2. Measured Variables						
Cate	HIV-related knowledge		The willingness to			
gory			participate in VCT			
	n	%	n	%		
Low	66	48.18				
Suffi	63	45.99				
cient	8	5.84				
High						
	Mean =	SD = 19.81				
	50.84					
Less			13	9.49		
Enou			121	88.32		
gh			3	2.19		
Very						
			Mean = 86.37	SD =		
				10.60		

Table 2 shows that most respondents have low HIVrelated knowledge but they were willing enough to participate in VCT. The Mean of HIV-related knowledge was sufficient, while the Mean of the willingness to participate in VCT was enough. The data of the willingness to participate in VCT was more homogenous than the data of HIV-related knowledge because of lower SD.

The statistical test result showed that HIV-related knowledge only influences the willingness to participate in VCT of 0.2% among nursing students ( $R^2 = 0.002$ ), while the other 99.8% influences are caused by the other unidentified factors. The regression model was not significant (p = 0.632).

#### IV. CONCLUSION

Table 1 showed that most respondents were aged 20-21 years old (54.75%). Youth aged 15–24 years old are vulnerable to HIV because of the strong influence of peer pressure and the development of their sexual and social identities which often lead to experimentation[7]. The majority of young people in those age group are at risk of HIV infection due to their engagement in unsafe sex, injection drug use, exposure to contaminated blood and blood products or unsterilized skin-piercing procedures. A descriptive study in Kenya proved that age is associated with HIV test uptake[10].

Table 1 showed that most study respondents were females (81.75%). Many other studies showed that gender is associated with the willingness to participate in VCT. VCT participants were more likely to be males in Namibia [11]; while men were relatively more likely to get tested for HIV than women through VCT in rural Ethiopia[12]. The study in Kenya showed that there were statistically significant differences between men and women in previous HIV testing status and HIV test uptake. The mean HIV-related knowledge was higher in men than women. Differences were found in expressed HIV stigmatizing attitudes, with women reporting more stigmatizing attitudes than men[10].

Table 1 showed that most respondents were single (78.10%). Marital status was proved to be associated with VCT participation in Namibia[10]. The basic pattern of behavior change seems to be consistent within marital status. Premarital sex among the unmarried couple and perceived higher severity-vulnerability to HIV among men were associated with willingness to be tested for HIV [13]. Only 2.19% unmarried respondents have had premarital sex found.

Table 1 showed that study respondents were varied in term of ethnic affiliation and religion. Besides gender, ethnic and religion may affect HIV-related stigma that influences the willingness to participate in VCT. The study in Namibia showed that cultural group was significantly associated with VCT participation; while another study in Burkina Paso showed that Bwaba ethnicity was significantly associated with perceived high personal risk of HIV (Sarker, et al. 2005). Broad cultural norms surrounding gender and HIV-related stigma affect the HIV testing and diagnosisseeking behaviors of members of at-risk marginalized populations (Lofquist, 2012)[14].

Many respondents come from the eastern part of Indonesia. Table 1 showed that 51.09% respondents finished their basic education outside Java island. A cross-sectional study in rural Ethiopia showed that behavioral and health service factors influence VCT utilization of rural people. Rural people who were better educated and had a comprehensive knowledge with no stigmatization attitude were more likely to undergo VCT. Regional state/province was also strongly associated with VCT utilization in both men and women [12].

Table 1 showed that 37.96% respondents live with parents. Students are highly vulnerable to HIV infection due to lack of knowledge and lack of parental supervision, especially university students who live far away from their parents, thus giving them more opportunity to try new things, including sex experience [2]. If most study respondents still live with their parents, it could be assumed that they get enough parental supervision.

All nursing students in the place of data collection were unemployed at the moment. Most of their day time was spent on the campus. The main financial supporter was their parents. Individual who belonged to households with higher socioeconomic status and non-farming occupation were more likely to utilize VCT [12]. Table 1 showed that most respondents' parents get the monthly salary of IDR 1-3 million (occupation was unidentified). It is below the Surabaya's minimum wage in 2017 (IDR 3,2 million). Housing status was mostly monthly rent (49.64%). It could be assumed that the socioeconomic status or social class of study respondents mostly lower middle. This could influence the accessibility of VCT information and services which lead to fear and HIVrelated stigma.

Table 1 showed that most respondents already got HIV health education twice or more so far (63.50%). Seminar/workshop event was shown to be the easiest way to gather HIV knowledge among nursing students (42.34%). Only 32.12% respondents got health education from the health care professional. A study in Debre Markos University students, North West Ethiopia (2011), showed that knowledge about HIV, perceived stigma, risk perception, and heard the presence of VCT confidentiality were associated with VCT service utilization among university students. Their major sources of information were mass media and health workers[15]. The information about HIV most likely more effective if disseminated through mass media (printed or electronic) based on [15]than health education activity because of the scope and accessibility among young generation nowadays. The dissemination of information especially on the asymptomatic nature of HIV infection could potentially be very important in forming risk perception, awareness, and the willingness to participate in HIV testing [16].

VCT is proven to be one of the most powerful weapons in halting the spread of HIV/AIDS. It is known to be a very important component of HIV/AIDS prevention strategies, but various studies have shown the low utilization of VCT service particularly in developing countries[15]. Some studies also have shown that knowledge about HIV often associated with individual willingness to participate in VCT. Table 2 showed that 48.18% respondents have low HIV-related knowledge, despite the fact that most of them were exposed to health education about HIV twice or more so far.

Table 2 showed that only 2.19% respondents showed their strong willingness to participate in VCT. This might be due to lack of knowledge (as shown in Table 1), the fear of HIV testing (expressed) and the possibility of HIV-related stigma. Students who have knowledge about HIV were 3.69 times more likely to utilize VCT service as compared to those who did not have knowledge about HIV[15]. A study in KwaZulu–Natal, South Africa, showed that despite knowledge of HIV, a significant number of patients referred for VCT do not test for HIV in the end [17].

The statistical result showed that HIV-related knowledge slightly affects the willingness to participate in VCT among nursing students ( $R^2 = 0.002$ ; means 0.02% influence). A cross-sectional study in Northeast China supports these study findings. It is showed that greater knowledge of HIV transmission misconceptions and the awareness that apparently healthy person can be an HIV carrier were significantly associated with greater willingness to participate in free HIV testing[18]. A descriptive study utilized data from the 2009/2010 Kenya Demographic Health Survey also showed that HIV-related knowledge, knowledge of someone infected with HIV/AIDS, education attainment were positively associated with HIV test uptake and HIV-related stigma [10]. Stigma is possibly being a key factor which was not identified in this study.

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