



KNOWLEDGE AND BEHAVIOR OF PREGNANT WOMEN FOR HIV TEST IN PITC MOBILE SERVICES AT BANDUNG CITY

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Abstract. Background : The Ministry of Health has developed a Human Immunodeficiency Virus (HIV) test service with the implementation of Provider Initiated Testing and Counseling (PITC) since 2010 which is carried out as part of Maternal and Child Health services where HIV testing is offered by service officers to pregnant women who access services in health facility. However, PITC services have not been optimally utilized by pregnant women. Report of the Ministry of Health in 2018 that 8,862 cases of pregnant women undergoing HIV examinations from 147,202. Most 28 (62.2%) pregnant women have good knowledge about HIV / AIDS and as many as 29 (64.4%) pregnant women have an agreed / supportive attitude towards voluntary HIV / AIDS counseling and testing. The aim of the study was to analyze the relationship between comprehensive knowledge and the behavior of HIV testing in the PITC program in Bandung City.

Methods : The research method is cross-sectional study with a sample of 76 respondents. Analysis with chi-square test data collection using a questionnaire.

Results : The results showed that the variable knowledge and history of STIs were significantly associated with acceptance in PICT services with a p value (<0.05). It is recommended that health workers who conduct PITC in ANC services provide health information / education both individually and in groups so that respondents have good knowledge before taking an acceptance PITC

Introduction

Based on the modeling study predicted Indonesia in 2025 will enter a generalized phase of the epidemic with 1.95 million people with HIV / AIDS, the prevalence of HIV in adults in Indonesia will be more than 1%, with 1.5 million deaths. (1)

The number of HIV cases reported up to 2017 has increased every year, cumulative HIV cases until 2017 are 291,129 people, the highest number of HIV infections is DKI Jakarta (53.3%) followed by East Java (41.76%), West Java (30, 26%). (2)

The highest presentation was reported in groups of 25 to 49 years (71.8%). The highest percentage of HIV risk factors is risky sex in heterosexuals.

It is estimated that there are more than three million heterosexual men in Indonesia who are customers of female sex workers (range 2,324,660 - 3,981,180), while the results of the research on the consistency of condom use in FSW / their customers are socialized in this study of 62.9 %. (3)

(4)

Customer men Commercial sex women (CSWs) are a major factor in HIV transmission to women. The chain of HIV transmission from mother to child begins with a virus carried by men who have wives and transmit it to the babies they contain. Results of the study of HIV viruses detected in maternal blood, breast milk, and vaginal fluids, the level of the virus in the fluid is related to HIV transmission from mother to fetus. (5)

Based on the results of the study, most of the respondents infected with the HIV virus were aged 18-35 years. This shows that the majority of respondents are women in childbearing age and sexually active. (6)

This fact is in accordance with the UNAIDS report which states that 90% of women living with HIV positive in Asia are infected by their husbands or sexual partners. The data also show that the transmission of HIV / AIDS men to their partner women is more common than women with HIV in their male partners (7).

A report from the Ministry of Health that out of 195,048 pregnant women who had new antenatal examinations 147,207 mothers who examined sexually transmitted infections including HIV testing and detected had STIs as many as 8,862 cases from 147,202. (2)

The data above illustrates that there are still pregnant women who have not taken STI tests including HIV. Factors related to the use of HIV tests include education levels, perceptions of the disease, perceptions of health services, husband's work, family income, affordability, perception of disease severity, perception variables of HIV / AIDS vulnerability and trigger factors to act on HIV testing behavior and the perception of self-stigma. (7) (8)

Most of the 28 (62.2%) pregnant women have good knowledge about HIV / AIDS and as many as 29 (64.4%) pregnant women have an agreed / supportive attitude towards voluntary HIV / AIDS counseling and testing. The results of the analysis of the two variables state that there is a relationship between knowledge and attitudes towards HIV / AIDS testing (9) Respondents with secondary education have the opportunity 3.6 times to receive Provider Initiated Testing and Counseling (PITC). (Marelich, 2012)

The Ministry of Health has developed HIV testing services with the implementation of PITC since 2010 which was carried out as part of the Maternal and Child Health service where HIV testing is offered by service officers to pregnant women who access services in health facilities. The procedures in PITC services are as follows: first stage; Health workers initiate clients for HIV testing by providing information / health education about HIV either individually or in groups. Second stage; clients are sent to trained counselors for pre-test counseling in the counseling room. Third phase; client takes an HIV test. Stage four after the results of counseling are carried out after an HIV test. From the results of the study it was found that the steps above were not carried out according to the guidelines. Most PITCs are carried out by health workers (law counselors), carried out in a service room without counseling rooms and pregnant women are encouraged to take an HIV test without first being given information about HIV. (10).

So that pregnant women carried out by PITC in ANC services at health facilities carry out HIV testing without having comprehensive knowledge about HIV. This study aims to analyze the relationship between comprehensive knowledge and the behavior of HIV testing in the PITC program in Bandung City.

METHODS AND MATERIALS

The research design is survey research with a cross sectional design in which independent variables and dependent variables are observed and measured at the same time. The total sample

is 76 respondents. Analysis with the chi-square test was conducted to determine the effect of independent variables on the dependent variable. Measurement of independent variables and variables is bound to use a questionnaire and is done by interviewing respondents directly.

Results and Discussion

Table 1 Sampel Characteristics

Variabel	Frekuensi (f)	Porsentase (%)
Age		
< 20 years	3	3,9
20 – 30 years	63	82,9
>35 years	10	13,2
Education		
Elementary	1	1,3
Junior High	8	10,5
Senior High	46	60,5
University		
Employment	21	27,6
House wife	66	86,8
Employee	10	13,2
IMS History		
Yes	15	19,7
No	61	80,3
HIV Test		
No	44	59,9
Yes	32	42,1
Knowledge		
Minus	40	52,6
Good	36	47,4
TOTAL	76	100%

Table 2 Characteristic related Acceptance PITC

Variabel	Acceptance PITC				P Value	OR
	No		Yes			
	n	%	n	%		
Age						
< 20 year	2	2,6	1	3,1	0,93	0,002
20 - 35 year	36	47,4	27	35,5		
> 35 year	6	7,9	4	5,3		
Education						
Elementary	1	1,3	0	0	0,77	0,7
Junior High	4	5,3	4	5,3		
Senior High	26	34,2	20	26,3		
University	13	17,1	8	10,5		
Employment						
House wife	39	59,1	27	40,9	0,41	1,6

Employee	5	50	5	50		
IMS History						
Yes	12	15,8	3	3,9	0,047	3,6
No	32	42,1	29	38,2		
Knowledge						
Poor	34	44,7	6	7,9	0,001	14,7
Good	10	13,2	26	34,2		

Integrated antenatal care in health facilities, including MCH services, nutrition, infectious disease control (immunization, HIV / AIDS, TB, Malaria, sexually transmitted diseases), managing chronic diseases and several other local and specific programs according to program needs. WHO issued guidelines for HIV testing through the HIV and Counseling Test Provider Initiative (PITC) program, the PITC program was adopted by Indonesia in integrated antenatal services in Puskesmas with the approach of offering routine HIV testing (called HIV screening) for pregnant, maternity or postpartum mothers come to health facilities in areas with a high prevalence of general HIV epidemics. (11) (12)

The PITC procedure includes services that include providing information about HIV, offering tests, HIV testing, submitting test results and counseling and referencing care, support and treatment if the results are positive. (13)

The majority of pregnant women attending antenatal care (80-90%) reported that health workers explained how HIV was transmitted, given advice on prevention and motivating husbands / partners to take HIV testing and the results of this study showed that PITC integrated in antenatal care was the best strategy to prevent prevention of HIV transmission from mother to child. (14).

Most PITC in Namibia are carried out by lay counselors who work in rapid test health services. The results of the study found that most of the PITC implementation was not carried out completely. Health workers do not know that giving information and counseling policies before and after the test is their job and they feel they are not trained, not supported and lack experience in providing information. So that women who carry out HIV testing in integrated antenatal care with the PITC model lack knowledge about HIV / AIDS. (10).

It is important for women to understand HIV-specific information about treatment, the approach to staying healthy, and having a baby. Health care professionals play an important role in providing accurate information to women about reproductive choices and must be willing to offer options and support for women for their decisions to ensure the best results for mothers and their babies. (15).

The results showed that knowledge was significantly related to acceptance in PICT services with a p value (<0.05). Knowledge of good HIV /

AIDS will be the basis for the formation of good behavior, through processes; wareness (awareness), where the person realizes in the sense of knowing in advance the stimulus (object). Interest (feeling attracted) to the stimulus or object. Evaluation (weighing) the good and not the stimulus for him. This means the respondent's attitude is better. Trial, where the subject starts trying to do something according to what the stimulus wants. Adoption, where the subject has behaved new in accordance with knowledge, awareness, and attitude towards the stimulus. If you do not have the knowledge of not having interest and adopting in this case you will not take an HIV test. Knowledge is important for behavior formation. (9) (16).

Likewise, the research results of Juanitha (2008) explain that good knowledge about HIV / AIDS will be the basis for the formation of good behavior. Poor knowledge about HIV / AIDS and VCT can make a wrong perception. knowledge or cognitive is a very important domain for the formation of one's actions, because from experience and research it turns out that attitudes and behavior based on knowledge will be more lasting than those not based on knowledge. From the results of the analysis obtained a value of 14.7 means that respondents who have good knowledge have a chance of 14.7 times for acceptance PITC compared with respondents who have less knowledge. (17) (18) and (9)

Respondents who had never experienced an STI had a chance 3.6 times not to take an HIV test while respondents who had less knowledge had a 14.7 chance not to take an HIV test. History of STIs and sexual behavior are risk factors for HIV infection. Likewise the results of other studies show that a history of STIs is significantly associated with the results of HIV screening (19) (20).

STIs are one of the important things in HIV transmission, from the results of the study found that the history of STIs (p value = 0.005) is the variable that has the most significant influence on acceptance in PITC, respondents who have good acceptance PITC are more common in respondents who never had STIs (72.2%) compared to respondents who had experienced STIs (41.9%). While respondents who had a poorly to acceptance PITC were found in respondents who had experienced STIs (58.1%) compared to respondents who had never experienced STIs (27.8%). (21).

Conclusion

In conclusion, the knowledge and history of STIs were significantly associated with the acceptance of PITC in pregnant women in Bandung (p value <0.05). Respondents who had never experienced an STI had a chance 3.6 times not to take an HIV test while respondents who had less knowledge

had a 14.7 chance not to take an HIV test. This study offers suggestions that pregnant women need to be given information about HIV both individually and in groups using effective media such as videos, so that time can be used effectively and efficiently so that the implementation of PITC can be carried out according to the procedure. Considering that HIV testing for pregnant women is important to prevent HIV transmission from mother to child so that the understanding of pregnant women about HIV must be good, for that health workers who carry out PITC must understand the PITC procedure. It is recommended for future research to develop audio-visual media for health education about HIV and it is necessary to do research on the knowledge and behavior of health workers in PITC services.

Competing Interest

The authors of this paper have no competing interest to report.

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References

1. Kesehatan K, Indonesia R. Skrining HIV di Rumah Sakit Dalam Upaya Pencegahan Penyebaran HIV. 2010;
2. Kementerian Kesehatan Republik Indonesia. Laporan_HIV_AIDS_TW_1_2018_OK.pdf. 2018.
3. Rokhmah D. Implikasi Mobilitas Penduduk Dan Gaya Hidup Seksual Terhadap Penularan Hiv/Aids. *Jurnal Kesehatan Masyarakat*. 2014;9(2):183–90.
4. Budiono. Konsistensi Penggunaan Kondom Oleh Wanita Pekerja Seks dan Pelanggannya. *Jurnal Kesehatan Masyarakat*. 2012;7(2):89–94.
5. Milligan C, Overbaugh J. The role of cell-associated virus in mother-to-child HIV transmission. *The Journal of infectious diseases*. 2014;210(Suppl 3):S631–40.
6. Khoiriyah Isni. Dukungan Keluarga, Dukungan Petugas Kesehatan, Dan Perilaku Ibu HIV Dalam Pencegahan Penularan HIV/AIDS ke Bayi. *Jurnal Kesehatan Masyarakat*. 2013;8(2):113–20.
7. Yeni Tasa., Ina Debora Ratu Ludji. RP. Pemanfaatan Voluntary Counseling And Testing Oleh Ibu Rumah Tangga Terinfeksi Human Immunodeficiency Virus. *Jurnal Kesehatan Masyarakat*. 2016;8(2):113–20.
8. Khosidah A, Purwanti S. Persepsi Ibu Rumah Tangga Tentang Voluntary Counselling and Testing (VCT) Terhadap Perilaku Pencegahan HIV/AIDS. *jurnal Ilmiah Kebidanan*. 2014;2:67–78.
9. Nuraeni Titik D. Hubungan Pengetahuan Ibu HAmil tentang HIV/AIDS dan VCT dengan Sikap Terhadap Konseling dan Tes HIV secara Sukarela di Puskesmas Karangdoro Semarang. *jurnal unimus*. 2011;
10. Davyduke T, Pietersen I, Lowrance D, Amwaama S, Davyduke T, Pietersen I, et al. Opportunities for strengthening provider-initiated testing and counselling for HIV in Namibia. *AIDS Care Psychological and Socio medical Aspects of AIDS/HIV Journal*. 2015;0121(November).
11. Kesehatan K, Jenderal D, Kesehatan B. Pedoman pelayanan antenatal terpadu. Jakarta: Kementerian Kesehatan Direktur Jendral Bina Kesehatan Masyarakat; 2010.
12. WHO. Guidance On Provider-Initiated HIV Testing and Counseling In Health Facilities. 2007. 1-66 hal.
13. Sudrani S, Prov D, Prodi S, Ikm S. Provider Initiative Test and Counseling (PITC) sebagai upaya perluasan tes HIV pada populasi khusus (studi kasus di Kota Kendari , Sultra). 2017;20(2015):2015.
14. Hardon A, Vernooij E, Bongololo-mbera G, Cherutich P, Desclaux A, Kyaddondo D, et al. Women ' s views on consent , counseling and confidentiality in PMTCT : a mixed-methods study in four African countries. *BMC Public Health [Internet]*. 2012;12(1):26. Tersedia pada: <http://www.biomedcentral.com/1471-2458/12/26>
15. Linda Burnes Crim. An Exploratory Descriptive Study of The HIV Infected Woman's Experience with Reproductive Counseling in Pregnancy. Faculty of Nursing in Capital University; 2003.
16. Husni A, Suheti T. Pengaruh Penerapan Metode Pembelajaran Brainstorming terhadap Peningkatan Pengetahuan Tentang Osteoporosis Pada Pra Lansia Di Posbindu Kelurahan Pajajaran Kota Bandung. *Jurnal Ilmu Kesehatan*. 2017;12(2).
17. Purnama AP. Efektifitas Penggunaan Media Video dan Media Leaflet Terhadap Perubahan Pengetahuan dan Sikap Siswa tentang Bahaya Napza di SMP Negeri 3 Mojosoongo Boyolali. 2014; Tersedia pada: id.portalgaruda.org
18. Junitha W. Pengetahuan tentang HIV / AIDS dan Voluntary Counseling and Testing (VCT), Kesiapan Mental , dan Perilaku Pemeriksaan di Klinik VCT pada Para Mitra Pengguna Obat

- dengan Jarum Suntik di Surakarta. *Jurnal Kedokteran Indonesia*. 2008;1(2):179–84.
19. Diwyami NP, Sawitri AAS, Wirawan DN. Sexual Role dan Riwayat Infeksi Menular Seksual Sebagai Risiko Serokonversi HIV pada Laki Seks dengan Laki yang Berkunjung di Klinik Bali Medika Badung , Bali Sexual Role and History of Sexual Transmitted Infection as a Risk of HIV Seroconversion among Men. *Public Health and Preventive Medicine Archive*. 2016;4:12–9.
 20. Hazairina SE, Setiawati EP, Amelia I. Hubungan Antara Karakteristik Klien LSL dengan Hasil Skrining HIV di UPT Puskesmas X Kota Bandung with HIV Screening Result in Upt Puskesmas X Bandung City. 2017;3(88):103–10.
 21. Saputra PK, Suryoputro A, Widjanarko B. Perilaku Tes HIV pada Laki-Laki yang Berhubungan Seks dengan Laki-Laki (LSL) di Provinsi Bali. *Jurnal Promosi Kesehatan Indonesia*. 2016;11(2):47–63.