

PROGRAM BOOK

**INTERNATIONAL SEMINAR AND
WORKSHOP ON ADVANCED CELLULAR
AND MOLECULAR BIOLOGY TECHNIQUES**



6 - 7 JULY 2017

INTEGRATED BIOMEDICAL LABORATORY

FACULTY OF MEDICINE

UDAYANA UNIVERSITY

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PARALLEL ORAL PRESENTATION

Time and Place	Speaker	Person in Charge/Moderator
Time : 16.00-17.00 Place : Ruang Sidang FK (Health)	<ol style="list-style-type: none"> 1. AA mas Putrawati Triningrat 2. Bagus Komang Satriayasa 3. Yuliana Heri Suselo 4. Dordia Anindita Rotinsulu 5. Silvi Dwi Anggraini 	Moderator : dr. I Kadek Swastika, M.Kes Committee : I Made Suardana
Time : 16.00-17.00 Place : Ruang Histologi (Health)	<ol style="list-style-type: none"> 1. Mahadewa Tjokorda BG 2. Made Kurnia Widyastuti Giri 3. I Nyoman Suarsana 4. Elysanti Dwi Martadiani 5. Desak Made Wihandani 	Moderator : Dr. dr. I Nyoman Wande, Sp.PK Committee : I Gede Wiranatha
Time : 16.00-17.00 Place : Ruang Bahasa (Health)	<ol style="list-style-type: none"> 1. Luh Putu In Indrayani Maker 2. I WP Sutirta Yasa 3. I Made Jawi 4. I Kadek Swastika 5. Ni Wayan Tianing 6. Septarini NW 	Moderator : dr. I Wayan Surudarma, M.Si Committee : I Dewa Ketut Alit Sumarsana
Time : 16.00-17.00 Place : Ruang kelas 401 Agriculture, Nutriion, And Environment	<ol style="list-style-type: none"> 1. Sheila Simanjuntak 2. I Ketut Berata 3. Ida Bagus Made Artadana 4. Lili Anggani 5. I Gusti Ngurah Gede Putra 6. Sang Gede Purnama 7. Vabera Maslami 	Moderator : dr. I Gusti Kamasan Nyoman Arijana, M.Si, Med Committee : I Made Arjana

Note :

- Time for presentation is @ 8 min (presentation + discussion)
- Please give your presentation to the committee when you register at the registration desk

THE PREVALENCE OF BACTERIAL VAGINOSIS (BV) AMONG REPRODUCTIVE WOMEN IN BALI

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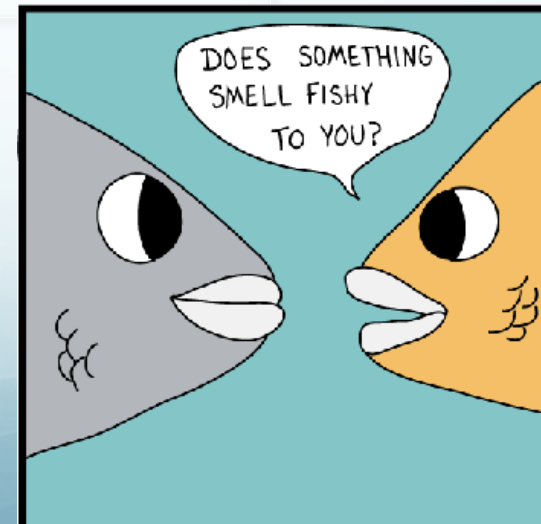
ABSTRACT

Bacterial Vaginosis (BV) is one of the most common vaginal infections among women in reproductive age. This infection occurs due to the reduction of number of lactobacilli bacteria and the massive increase of anaerobic bacteria on vagina. *Gardnerella vaginalis* is one of the agents of disease. If it is left under-diagnosed, it will cause serious complications to the women, including uterus infection, pelvic inflammatory disease, sterility as well as outside reproductive organ complication. It is also increase the chance of HIV infection. In Bali, there was no research on the prevalence and determinants of BV. This was a cross-sectional study conducted in two STIs clinics in Bali. The samples were women in reproductive age that visited those clinics. Besides collecting vaginal secret from the women to be tested using gram stain methods to find clue cells, the subjects were also asked about BV's determinants. Ethical clearance was obtained from Medical Faculty/Sanglah Hospital, Udayana University. Subjects were given informed consent prior to sample collection. The total subjects joined this study were 100 women. The prevalence of Bacterial vaginosis among subjects was 67%. No statistically significant relationship was found between determinants including age, contraceptive use, parity, and condom use with the increase risk of getting BV infection. However, the high prevalence of this disease suggest that there is need to screen this disease is one of the prevention matter at the general community level in order to give prompt treatment and prevent the spread and complication.

Keywords: *Bacterial vaginosis, determinants, reproductive women*

OM SWASTIASTU

THE PREVALENCE OF BACTERIAL VAGINOSIS (BV) AMONG REPRODUCTIVE WOMEN IN BALI



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BACKGROUND (1)

- *Bacterial vaginosis (BV)* → one most common vaginal infection occur among reproductive age women.
- BV is a polymicrobial infection which cause the reduction of lactobacillus followed by the massive increase amount of anaerobic bacteria on vagina.
- The most common causal bacteria → *Gardnerella vaginalis*.

BACKGROUND (2)

- If this infection is not treated properly → complication i.e. endometritis, pelvic inflammatory disease, outer reproductive organ complication, sterility and the increase risk of other STIs including HIV.
- In Indonesia → lack study on BV
- Bali → lack study on the prevalence of BV among reproductive age women.

Objectives

- 1. To find out the prevalence of BV among women in reproductive age in Bali.**
- 2. To analyse the determinants of BV among women in reproductive age in Bali.**

Research framework

Host:
1. Age

**Bacterial vaginosis
infection among women in
reproductive age**

Agent:
Gardnerella vaginalis

Environment:

1. Educational status
2. Marital status
3. Type of job
4. High risk sexual behaviour
5. Contraceptive use
6. Pregnancy

METHOD

- Research Design
 - Cross sectional analitik
 - Quantitative
- Site and Time frame
 - 2 reproductive health (Amerta Clinic and PKBI Bali Clinic) → *one stop service clinic which serve women in relation to reproductive health in Bali*
 - 10 months

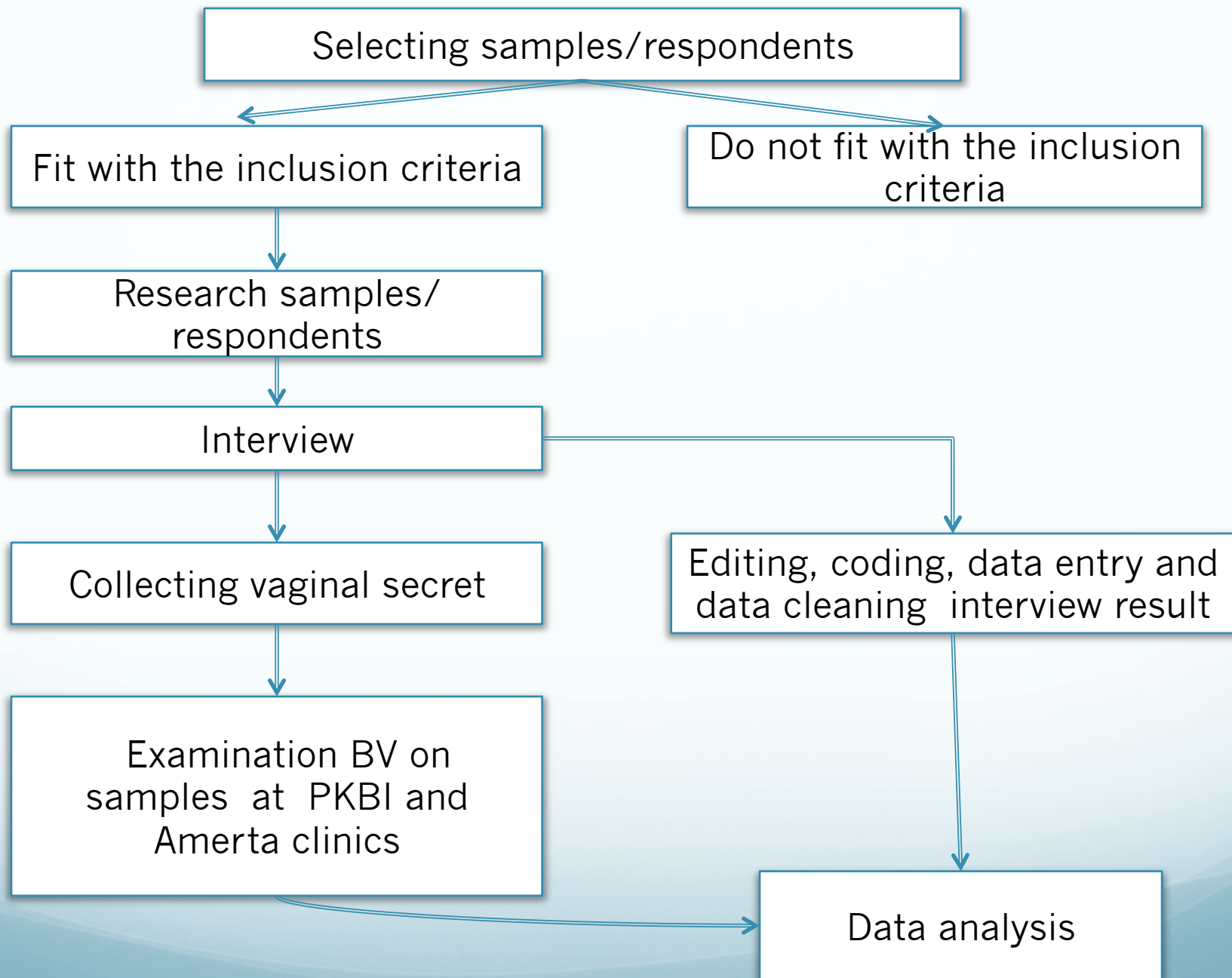
METHOD

- Samples/ Respondent
 - Inclusion: women who attend those 2 clinics in order to get STIs
 - Exclusion: refuse to join be part of the research
- Sample size
 - Min. 95 women

METHOD

- Sampling technique
 - *Consecutive sampling*
 - Samples were selected based on the attendance to the clinic in the research time frame

Research flowchart



RESULTS

Samples/respondents characteristics

Characteristics		N = 100
Age		
	Mean (SD)	34.3 (7)
Education level		
	Illiterate	4%
	Elementary-Junior High School	52%
	Senior High School and above	44%
Marital status		
	Married	58%
	Divorced/Widow	37%
	Never been married	5%

RESULTS

Samples/respondents characteristics

Characteristics		N = 100
Parity		
	Mean (SD)	1.9 (0.4)
Type of job		
	Housewives	17%
	Others	83%
Pregnancy status		
	Pregnant	4%
	Not-pregnant	96%
Contraceptive device use		
	Use	68%
	Not use any	32%
Residential status		
	City/In town	74%
	Out of town	26%

RESULTS

- The prevalence of BV among women

Category	Frequency	Percentage
Normal	6	7.4
BV	52	64.2
Others (GO, NGI)	23	28.4
Total	81	100

RESULT

Cross tabulation between BV infection and determinants

Determinants		BV			OR	P
		Yes	No	Total	95% CI	value
Age						
	<45 years	50(65,8%)	26 (34,2%)	76 (100%)	2,885	0,343
	>=45 years	2 (40%)	3 (60%)	5 (100%)	(0,453-18,365)	
Education level						
	Low level	28 (65,1%)	15 (34,9%)	43 (100%)	1,089	
	High level	24 (63,2%)	14 (36,8)	38 (100%)	(0,438-2,705)	0.854
Type of job						
	Housewives	10 (66,7%)	5 (33,3%)	15 (100%)	0.875	0,825
	Others	42 (63,6%)	24 (36,4%)	66 (100%)	(0,268-2,862)	

RESULTS

Determinants		BV		Total	OR	P
		Yes	No		95% CI	Value
Residential						
	Inner city	34 (60,7%)	22 (39,3%)	56 (100%)	1,664	0,328
	Outer city	18 (72,0%)	7 (28,0%)	25 (100%)	(0,597-4,635)	
The use of contraceptive method						
	Yes	40 (67,8%)	19 (32,2%)	59 (100%)	0,570	0,269
	No	12 (54,5%)	10 (45,5%)	22 (100%)	(0,209-1,551)	
Pregnancy status						
	Yes	3 (75%)	1 (25%)	4 (100%)	0.583	1
	No	49 (63,6%)	28 (36,4%)	77 (100%)	(0,058-5,879)	
Highrisk sexual behaviour						
	Have more than 1 sexual partners	22 (62,9%)	13 (37,1%)	35 (100%)	1,108	0,826
	Only have 1 sexual partner	30 (65,2%)	16 (34,8%)	46 (100%)	(0,444-2,768)	

Conclusion

- The prevalence of BV among reproductive women in this research is 64,2%
- There is no determinant that find to be significantly influence the BV prevalence
- However, factors that find to be related to this infection ($OR > 1$) are
 - Age (OR: 2.88)
 - Residential status (OR: 1.66)
 - High risk sexual behavior (OR: 1.1)

RECOMMENDATION

- BV examination should be conducted routinely among women in reproductive age to prevent complication since the prevalence in this research is quite high
- Other research are needed in order to find out the determinants that significantly influence this infection among women in reproductive age.

- Matur Suksma
- Terima Kasih

