

# Program Book



**Andalas International Public Health Conference  
and  
The 5<sup>th</sup> National Meeting of  
The Indonesian Public Health Union  
(MUNAS V PERSAKMI)**

**Organized by :  
Faculty of Public Health, Andalas University**

**September 6 - 7, 2017  
Padang, Indonesia**





# Program Book



September 6-7, 2017  
Padang, Indonesia



# Welcome Message

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Dear Andalas International Public Health Conference attendees,

On behalf of Andalas International Public Health organizer, it is my great pleasure to welcome you to the Andalas International Public Health Conference 2017 in Padang, Indonesia. Faculty of Public Health, Andalas University organizes this distinguished event as its contribution to public health development, particularly with regards to SDGs achievement developing countries. This conference will gather many public health actors to contribute together towards human well-being through research, publication, capacity building and advocacy.

Andalas International Public Health Conference (AIPHC) 2017 attended by 300 participants from various countries and backgrounds. They will share ideas in public health fields on September 5-7, 2017. At the end of this event, AIPHC attendees are invited to join a trip to enjoy the gorgeous view of West Sumatera Province.

I would like to express my gratitude to the Rector of Andalas University, The Indonesian Public Health Union (Persakmi), colleagues, academics, researchers, students and all participants. Hopefully, this conference will improve the quality of public health strategies in the future.


Sincerely,

**Defriman Djafri, SKM., MKM., Ph.D**

Dean of Faculty of Pulic Health Andalas University



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# Organizing Committee

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## Advisor

Prof. Dr. Tafdil Husni, SE, MBA	: Rector of Andalas University
Defriman Djafri, SKM, MKM, PhD	: Dean of Faculty of Public Health
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Febrianty

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## **Organizer: Faculty of Public Health, Andalas University**



The establishment of the Faculty of Public Health, Andalas University (FKM Unand) originated from the Study Program of Public Health Sciences, Faculty of Medicine, Andalas University (PSIKM FK Unand) which was established in 2000 along with the issuance of the Decree of the Director General of Higher Education No. 400/DIKTI/Kep/2000 in November 30, 2000. The aim is to educate public health in bachelor level who is able to handle public health problems particular in the Central Sumatra and Indonesia in general.

The developments of PSIKM since it was established was accompanied by the high interest of the community, the Faculty of Medicine as the mother of PSIKM intends to prepare the development of PSIKM into new faculty. It was finally realized with the inauguration of Faculty of Public Health Andalas University by Rector Unand at that time, Dr. Werry Dartta Taifur, SE. MA, on Friday, July 13, 2012. FKM has 34 lecturers. Most of them are have doctoral education and completing doctoral degree at Indonesia and abroad. Until now, FKM has 2 study programs. They are Public Health Study Program and Nutrition Study Program. The Public Health Study Program of itself is divided into 4 specializations are Epidemiology, Nutrition, Administration and Health Policy (AKK), Reproductive Health (Kespro) and Occupational and Environmental Health (K3 & KL).



# Program at Glance

Date	Time	Program			
5 Sept	08.00	Registration			
	09.00	Workshop 1 (Basa I)	Workshop 2 (Basa II)	Workshop 3 (Batuah I)	Workshop 4 (Batuah II)
	10.00				
	11.00				
	12.00	Lunch break (Restoran Angso Duo)			
	13.00	Workshop 1 (Basa I)	Workshop 2 (Basa II)	Workshop 3 (Batuah I)	Workshop 4 (Batuah II)
	14.00				
	15.00				
	16.00	GR Conference Opening (Ballroom)	Side-meeting Persakmi (Basa I)		
	17.00				
	19.00				
	20.00				
	21.00	Dinner in Sati II			
6 Sept	07.00	Conference registration, poster drop counter			
	09.00	Safety induction			
	09.05	Opening ceremony from MC			
	09.10	Sing a national song of Indonesia			
		Art performance			
	09.15	AIPHC Chairman			
	09.25	Dean of Faculty of Public Health			
	09.35	Welcome Speech from Chairman of PERSAKMI			
	09.40	Rector of Andalas University			
	09.45	Opening: The Governor of West Sumatera Povince			
	10.00	Photo session			
		Pray			
	10.15	Coffee break and Poster Display (Sati III Room)			
	10.20	Keynote speech: The Governor of West Sumatera Povince			
	10.30	Panel Discussion 1 (Sati Ballroom) Linking Health Promotion and Disease Prevention to SDGs			
	11.00				



		<p><b>1. Dr. M. Subuh</b> The Challenges on Achieving SDGs in Indonesia: from Public Health Perspective</p> <p><b>2. Prof. Hari Kusnanto</b> The Target of Health Development Agenda of SDGs: Where are we now?</p> <p><b>3. Hanifa Maher Deny, SKM, MPH, PhD</b> The Need of Public Health Professionalism in Accelerating SDGs Achievement</p> <p><b>4. Defriman Djafri, SKM, MKM, PhD</b> Developing an Evidence-Based Public Health Policy: Another Core Competency of Public Health Professional for SDGs Achievement</p>				
	13.00	Lunch break (Angso Duo Restaurant)				
	14.00	Scientific Presentation I (Sati I)	Scientific Presentation II (Sati II)	Scientific Presentation III (Basa II)	Scientific Presentation IV (Batuah I)	Scientific Presentation V (Batuah II)
	14.30					
	15.30					
	15.30	Coffee break and Poster Display (Sati III Room)				
	15.45	Scientific Presentation VI (Sati I)	Scientific Presentation VII (Sati II)	Scientific Presentation VIII (Basa II)	Scientific Presentation IX (Batuah I)	Scientific Presentation X (Batuah II)
	16.30					
	17.15					
	17.15	Side-meeting Persakmi (Basa II & Batuah I)				
	18.30					
	19.00	Welcome Dinner				
	20.00	Side-meeting Persakmi (Basa II & Batuah I)				
	23.00					
7 Sept	08.30	<p><b>Panel Discussion 2</b> (Sati Ballroom)</p> <p><b>Effectiveness and Efficiency of Health Promotion and Disease Prevention Initiatives in Managing NCDs</b></p> <p><b>1. dr. Anung Sugihantono, M.Kes</b> Indonesian Policy in NCDs Prevention and Screening</p> <p><b>2. Prof. Syed Aljunid</b> Cost-effectiveness Intervention on NCDs Prevention: HPV Vaccine, Screening of Colorectal Cancer, and Mammogram</p> <p><b>3. Prof. Umesh Kapil</b> Current Evidence on Vitamin A Supplementation for Reduction of under Five Mortality in Developing Countries Including Indonesia</p> <p><b>4. Dr. Mary Assunta</b> Tobacco Control in ASEAN region: Progress and Challenges</p>				



10.00	Coffee break and Poster Display (Sati III Room)				
10.30	<b>Panel Discussion 3</b> (Sati Ballroom) <b>Role of Health Financing Program in Health Promotion and Disease Prevention</b> <b>1. Dr. Mundiharno, M.Si</b> Health Financing Policy on Health Promotion and Disease Prevention in Indonesian NHI <b>2. Madeleine R. Valera MD, M.SciH</b> Role of Health Financing Program in Health Promotion and Disease Prevention in the Philippines NHI <b>3. Prof. Sukil Kim</b> Strategies for Effective Health Promotion and Disease Prevention Financing in Korean NHI <b>4. Ade Suzana E.P, SKM, M.Comm Health, PhD</b> Challenges on Managing Health Promotion and Disease Prevention Funds in Indonesia				
12.00	Lunch break (Angso Duo Restaurant)				
13.30	Scientific Presentation XI (Sati I)	Scientific Presentation XII (Sati II)	Scientific Presentation XIII (Basa II)	Scientific Presentation XIV (Batuah I)	Scientific Presentation XV (Batuah II)
14.30					
15.00					
15.00	Coffee break and Poster Display (Sati III Room)				
15.30	Closing Ceremony from Dean of Public Health Faculty (Sati Ballroom)				
16.00	Munas (Basa II & Batuah I)	Dinner Persakml (Sati II)			
23.00					



# Venues

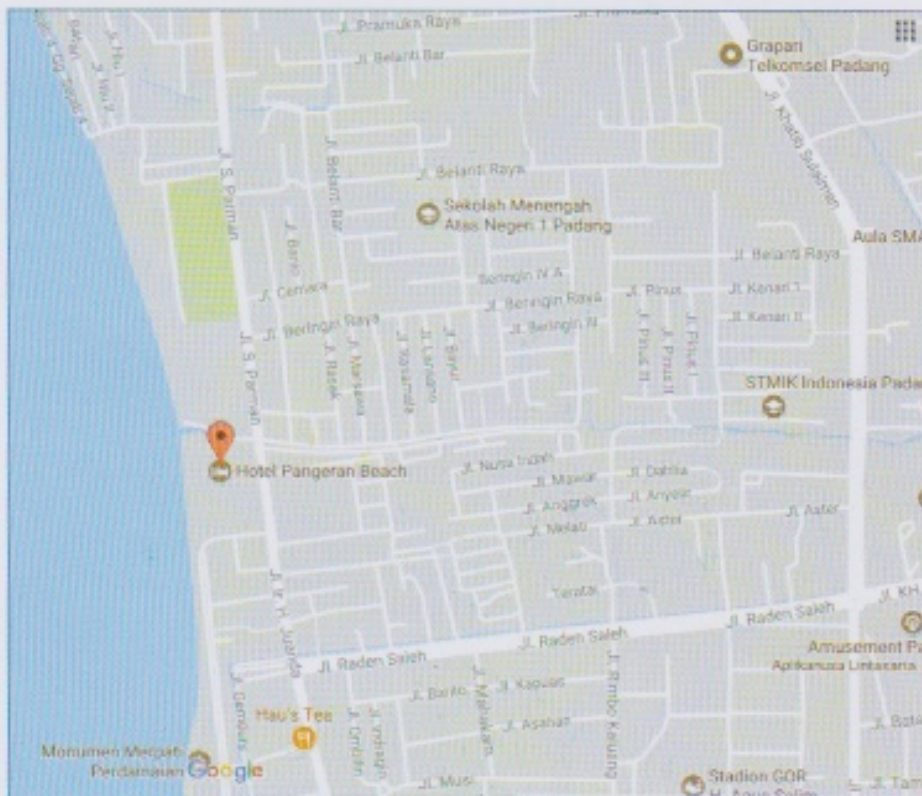
## *Hotel Pangeran Beach*

Jl. Ir. H. Juanda No. 79

Padang 25115

West Sumatera, Indonesia

Hotel Pangeran Beach, a four-star hotel, located right on the magnificent beach side of the Indian Ocean. The hotel is located in the heart of central business and only 30 minutes from Minangkabau International Airport. Hotel Pangeran Beach is designed to provide hospitality and the best place for a conference with capacity up to 1000 participants.



Pangeran Beach Hotel

## Panel Discussion

Day2 : September 6, 2017

Time	Agenda	Room
10.45 – 12.15	<p><b>Panel Discussion 1</b></p> <p><b>Linking Health Promotion and Diseases Prevention to SDG's</b></p> <ol style="list-style-type: none"><li>1. Dr. M. Subuh The Challenges on Achieving SDGs in Indonesia: from Public Health Perspective</li><li>2. Prof. Hari Kusnanto The Target of Health Development Agenda of SDGs: Where are we now?</li><li>3. Hanifa Maher Deny, SKM, MPH, PhD The Need of Public Health Professionalism in Accelerating SDGs Achievement</li><li>4. Defriman Djafri, SKM, MKM, PhD Developing an Evidence-Based Public Health Policy: Another Core Competency of Public Health Professional for SDGs Achievement</li></ol>	Sati Ballroom



Day3 : September 7, 2017

Time	Agenda	Room
08.00 -10.00	<p><b>Panel Discussion 2</b></p> <p><b>Effectiveness and Efficiency of Health Promotion and Disease Prevention Initiatives in Managing NCDs</b></p> <ol style="list-style-type: none"><li>1. dr. Anung Sugihantono, M.Kes Indonesian Policy in NCDs Prevention and Screening</li><li>2. Prof. Syed Aljunid Cost-effectiveness Intervention on NCDs Prevention: HPV Vaccine, Screening of Colorectal Cancer, and Mammogram</li><li>3. Prof. Umesh Kapil Current Evidence on Vitamin A Supplementation for Reduction of under Five Mortality in Developing Countries Including Indonesia</li><li>4. Dr. Mary Assunta Tobacco Control in ASEAN region: Progress and Challenges</li></ol>	Sati Ballroom
10.30 - 12.00	<p><b>Panel Discussion 3</b></p> <p><b>Role of Health Financing Program in Health Promoion and Diseases Prevention</b></p> <ol style="list-style-type: none"><li>1. Dr. Mundiharno, M.Si Health Financing Policy on Health Promotion and Disease Prevention in</li></ol>	Sati Ballroom

	<p>Indonesian NHI</p> <p>2. Madeleine R. Valera MD, M.SciH Role of Health Financing Program in Health Promotion and Disease Prevention in the Philippines NHI</p> <p>3. Prof. Sukil Kim Strategies for Effective Health Promotion and Disease Prevention Financing in Korean NHI</p> <p>4. Ade Suzana E.P, SKM, M.Comm Health, PhD Challenges on Managing Health Promotion and Disease Prevention Funds in Indonesia</p>	
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### Scientific Presentation III

Track : Enviromental and Occupational Health I

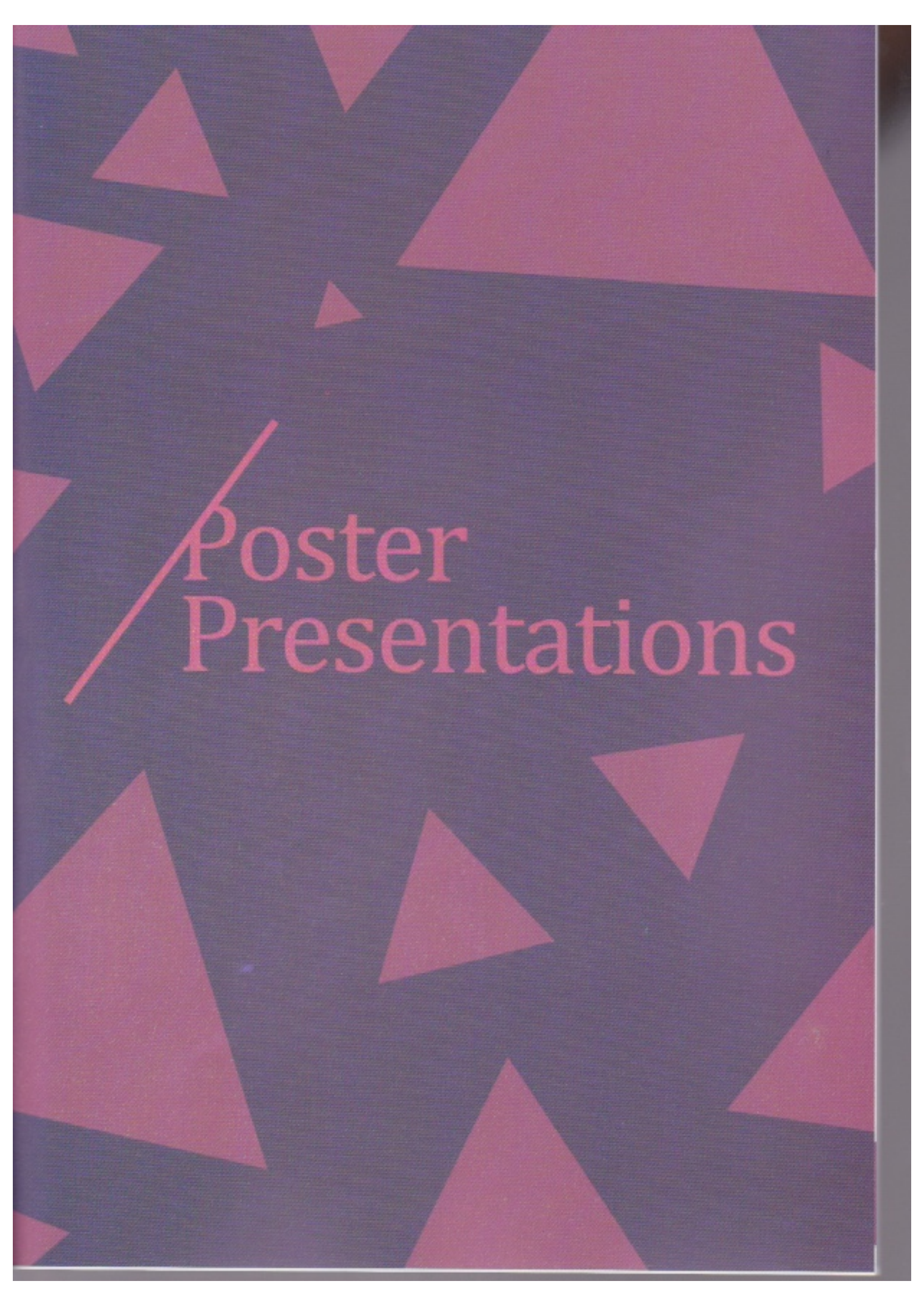
Room : Basa II

Date : 6 September 2017

Time : 13.30 - 15.00

No.	Title	Authors
1.	Evaluation of Subjective Symptoms and The Concentrations of Benzene, Toluene and Xylene Exposure in Shoe Manufacturing Industry	Taufik Ashar, Evi Naria, Devi Nuraini
2.	The Association of Urinary Cadmium, Malondialdehyde in Urine and Parkinsonism Symptoms in Community that Exposed to Cadmium from Drinking Water	Taufik Ashar, Surya Dharma
3.	Health risk of inhaled ammonia (NH <sub>3</sub> ) to urea and ammonia plant workers at PT K.	Ratna Dwi Puji Astuti, Rachmadhi Purwana
4.	Distribution of potential pollutants and well distances In the Code River area of Yogyakarta City	Ahmad Faizal Rangkuti, Musfirah
5.	Effect Of Nitrogen Dioxide (NO <sub>2</sub> ), Premature Birth. And LBW Against Of Recurrence Of Asthma In Children Based On Residential Area	Septia Pristi Rahmah
6.	Determinants of Sustainable Waste Management Intention Behavior on Junior High School Students in Padang, Indonesia	Aria Gusti
7.	Relationship of Noise Intesity, Personal Protective Equipment Use with Hearing Loss on Ground Handling Workers in Kualanamu International Airport	Ramadhani Safrina, Silaban Gerry, Hasan Wirsal
8.	Effect Of Work Stress, Work Fatigue On Secondary Infertility Of Nurses In Inpatient Wards Of RSUD DR Djoelham Binjal 2017	Tarigan Renny Adelia, Silaban Gerry, Siregar Ganis Fidel
9.	Occupational Safety And Health Risk Analysis At Production Division With Hirarc Method In Rubber Company Pt. Bhb Padang City	Mitbasman Mikra, Nizwardi Azkha, Nopriadi
10.	The Quality Of Water Mahakam River Was On Public Health At Loa Duri Village Loa Janan Kutai Kartanegara District	Hansen



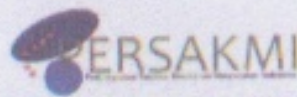


Poster  
Presentations



No.	Title	Authors
1.	Comparison Of Accuration Kinyoun Gabbet Stain To Lugol Stain For Detection Of Soil Transmitted Helminths	Merina Panggabean, Cut Lifia Fitriani, Yoan Carolina Panggabean
2.	A Retrospective Study Of The Asosiated Between Quantity And Variaties Fruit Consumption With Glycemic Status In Patient Type-2 Diabetes Mellitus	Juli Widlyanto, Isnaniar, Trisiwi Kusuma Ningrum
3.	Changing Of Climate With Dengue Hemorrhagic Fever Of Pariaman City	Masrizal, Delvallanggi, Fauziah Elytha
4.	Nutritional Status, Physical Activity And VO2 Max Among Male Student In SMA Sutomo 2 Medan	Irianto, Nenni D Lubis, Sri Amelia
5.	Implementation Of Policy On Health Operational Cost At Health Department Of Palu	Muhammad Ryman Napirah, Muhammad Jusman Rau, Indah Ekmy Siantary Putri
6.	Analysis Of Fullfilment Tools Of Active Fire Protection And Tools Of Saving In The Building Of Public Health Faculty In Andalas University 2017	Ramon Odipatra
7.	Factors That Affect Work Stress Of Garment Workers In South Tangerang Villages	Dini Widianti
8.	E. Coli Infection At A Newborn Celebration : Food Poisoning Outbreak In Teluk, Indonesia	Muhammad Syairaji
9.	The Use Of Chitosan Cuo Composite As Adsorbent To Decrease Metal Cadmium (Cd) In Dug Well At Namo Bintang Village	Yenni Farida Siregar
10.	Relationship Between The Readability In Emergency Form With The Accuracy Of The External Causes Coding Of Injury On Traffic Accident	Nandita Risa
11.	Patient Handling Risk Relationship With Musculoskeletal Complaints On Nurses In Inpatient Unit RSUD DR. RM. Djoelham Binjai	Jhely Febria
12.	Risk Factors Affect The Occurrence Of Salt In Hypertension At Puskesmas Patumbak	Ginting Wira Maria
13.	Relationship Chracteristics, Lifestyle, Social Factors And Nutrition Intake With Nutritional Status On Elderly In Padangmatinggi Community Health Center Of Padangsidimpuan	Johanna Christy
14.	Risk Factors That Affect The Occurrence Of CHD In TNI < 40 Years At TK II Putri Hijau Hospital Medan	Jun Edy Pakpahan
15.	The Risk Factors For Chronic Kidney Disease Incidents In Dr. M. Djamil Hospital Padang 2016	Roma Yuliana
16.	Environmental Health Risk Assessment Of PM10 Exposure To Traders In Siteba Market Area Padang	Aria Gusti
17.	Factors Which Influence The Incidence Of Imminent Abortion In The Regional General Hospital Padangsidimpuan	Layla Fadhilah Rangkuti
18.	Risk Factor Of Stunting Incidence In Girls Aged 2-3 Years In Working Area Primary Health Center Of Biru, Southern Tapanuli	Anni Mardiah Pohan
19.	Embedding Health Action Process Approach (Hapa) In Developing Parenting Program To Enhance Maternal Efficacy Of Care	Leny Latifah





267/PP-PERSAKMI-SKP/VII/2017/ 4 SKP  
122/IJAKMIPOSAT/SKP-VI/2017/3SKP

# Certificate

is awarded to

**Dr. Aria Gusti, SKM, M.Kes**

as

**ORAL PRESENTER**

has attended

**Andalas International Public Health Conference 2017**

and

**The 5<sup>th</sup> National Meeting of The Indonesian Public Health Union**

**September 5-7, 2017**

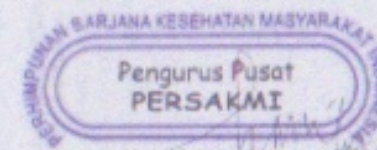
**Padang, Indonesia**



**Defriman Djalri, SKM., MKM., Ph.D**  
Dean, Faculty of Public Health  
Andalas University



**Ade Suzana E.P., SKM., M. Comm Health, Sc., Ph.D**  
Chairman of AIPHC 2017



**Hanifa M. Denny, SKM., MPH., Ph.D**  
President of Indonesian Public Health Union



**Makalah AIPHC**  
**(Oral Presentation)**

# Determinants of Sustainable Waste Management Intention Behavior on Junior High School Students in Padang, Indonesia

Aria Gusti

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**Background :** The low awareness of the population to implement sustainable waste management behavior has an impact on increasing the amount of waste in the environment. This study aims to analyze the influence of attitudes, subjective norms, and Perceived Behavior Control (PBC) on sustainable waste management intention behavior and the influence of knowledge on attitude toward sustainable waste management behavior.

**Materials and methods :** This research is a quantitative research with cross sectional design. The population is the students of Junior High School in Padang City. The sample is taken by proporsional random sampling technique. Data analysis using structural equation model (SEM) with AMOS program.21.

**Results :** The results of this study indicate that knowledge does not affect students' attitudes toward sustainable waste management (CR = 1.204; p = 0.229). Attitudes have no effect on intention behavior (CR = 1.853; p = 0.064). The subjective norm has an effect on intention behavior (CR = 3.456; p = 0.001). PBC has an effect on sustainable waste management intention behavior (CR = 2,799; p = 0,005).

**Conclusions :** Subjective norms and PBC are determinants of sustainable waste management intention behavior in junior high school students in Padang. It is suggested to the Education Office of Padang City to include teaching materials on sustainable waste management behaviour into the environmental education curriculum of Junior High School.

**KEYWORDS:** Intention, Behaviour, Sustainable Waste Management, Junior High School

## 1 INTRODUCTION

Urban waste is one of the global issues related to the future of urban areas. Compared to urbanization. Garbage generation as one of the main products of urban lifestyle is develops faster.(1) It will certainly require a huge budget to improve the waste disposal and treatment facilities going forward.

The natural environment as well as the quality of human health is negatively impacted by untreated waste (2). Poor urban waste management systems are believed to be related to the spread of 80 percent of diseases in developing country communities (3). For people in developing countries who are still struggling with water shortage and food availability This in itself becomes an additional problem.

The behavioral intent to apply SWM is measured by three determinants (4). First relating to the attitudes of the individual towards the behavior of SWM, the second determinant relates to how much social pressure is perceived to apply the behavior (subjective norm), and the third determinant associated with the perception of control in relation to that behavior is called perceived behavioral control (PBC ).

The daily amount of waste in Padang City in 2013 with a population of 871,334 people is estimated at 3,050 m<sup>3</sup> (784 tonnes), while from waste produced only 400 ton / day (51%) can be transported to landfill. The rest is generally housed in temporary dumps located on the



roadside or at a certain street corner. Conditions that can cause negative impacts on the environment, because it reduces the smooth traffic, creating unpleasant odors, reduce the beauty of the city, can even be a disease.

Based on the above description, it can be stated that the formation of sustainable waste management behaviors in first-grade, sustainable-oriented junior high school students can be a role of model for sustainable waste management behavior in the family and the environment. The relationship between attitudes, subjective norms and PBC to students' behavioral intentions in sustainable waste management and knowledge relation on sustainable waste management with student attitudes toward sustainable waste management is a problem that the answer to this study is seeking to obtain.

## 2 METHOD

This research is a cross sectional survey. Based on the purpose and hypothesis of the study determined the variables used in this study. There are five variables, namely knowledge, attitude, subjective norm, PBC, and behavioral intention. Furthermore, the development of research instruments conducted through literature study for knowledge and intension variables and beliefs elicitation for attitude variables, subjective norms, and PBC. Next set the population, sample and sample size.

The research was conducted in Padang City, West Sumatera by taking the location at State Junior High School (SMPN) 1 Padang as Adiwiyata Mandiri award winning school in 2015 from the Ministry of Environment and Forestry. While for schools that are not recipients of adiwiyata awards are represented by SMPN 18 Padang.

There are five variables used, namely knowledge, attitude, subjective norm, PBC, and intention. Questionnaires and interviews were conducted in data collection. Data analysis using Structural Equation Modeling (SEM) method. The analysis results are interpreted and then summarized in accordance with the research objectives and suggestions provided.

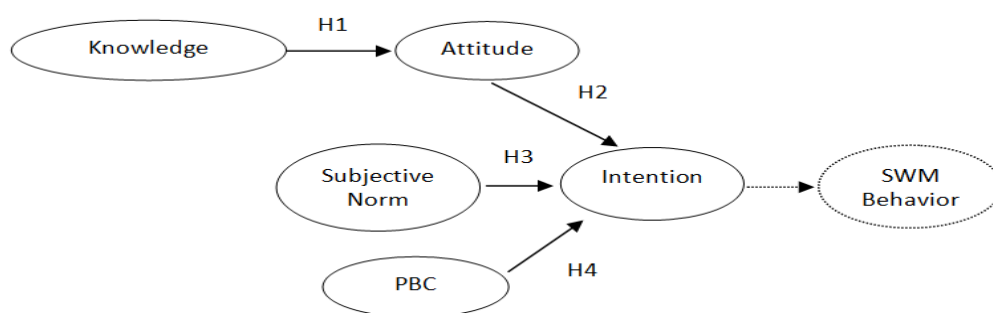


Figure 1 : Showing The Conseptual Framework of Study

Inappropriate with the purpose, this study measures the TPB variables to understand the behavioral intention to implement the SWM using SEM. First of all, this study examined the relationship between knowledge of SWM with students' attitudes toward the behavior of SWM (Hypothesis 1). Furthermore, this study analyzed the relationship between attitudes and behavioral intentions (hypothesis 2), subjective norms and behavioral intentions (hypothesis 3), and the PBC and behavioral intentions (hypothesis 4) as shown in Figure 1.

### 3 RESULT

#### 3.1 MEASUREMENT MODEL

The CFA result obtained the loading factor value of latent variable forming items less than 0.5, not included for the SEM Full Model analysis. The value of Cronbach's Alpha all exceeded the acceptance limit of 0.7 and so was the value of variance extracted (VE) all above the acceptance limit of 0.5 (5). Furthermore, based on confirmatory factor analysis, all latent variables and indicators can be used for further analysis without modification or adjustment.

#### 3.2 STRUCTURAL MODEL

SEM analysis tested using AMOS 22 with maximum probability estimation (MLE). The full model fit modeling results show considerable agreement between the conceptual model and the data obtained from the research as shown in Table 1.

**Table 1 : Goodness-of-Fit Test Index**

Goodness of Fit Index	Cut off Value	Test Result	Evaluation
Chi Square	expected to be small	503.079	Marginal
Cmin/Df	≤2.00	2.256	Marginal
GFI	≥0.9	0.822	Marginal
CFI	≥0.95	0,872	Marginal
RMSEA	≥0.08	0,079	Good

The results of the analysis using the t test for regression weights generated by the model are presented in Table 2. Knowledge of sustainable waste management is not related to attitudes toward sustainable waste management behavior (CR = 1.204; p = 0.229). Further attitudes towards sustainable waste management behavior are not related to behavioral intentions (CR = 1.853; p = 0.064). The subjective norm is related and positively contributes to the behavioral intention (CR = 3.456; p = 0.001). Finally, PBC is related and positively contributes to sustainable waste management behavior intentions with (CR = 2,799; p = 0,005).

**Table 2 : Summary of Structural Model**

	Related	Estimate	CR	p-value
Attitude	<--- Knowledge	0.40	1.20	0.229
Behavioral Intention	<--- Attitude	0.21	1.85	0.064
Behavioral Intention	<--- Subjective Norm	0.40	3.46	0.001
Behavioral Intention	<--- PBC	0.16	2.79	0.005



## 4 DISCUSSION

The rationale of this study is to scan and observe the determinants of sustainable waste management behavior intentions and also to ensure the relative strength of each determinant factor consisting of attitude, subjective norms and perceived behavioral control. This study also discusses the relationship of knowledge on sustainable waste management with attitudes toward sustainable waste management. Overall, this study was conducted using a behavioral planning theory framework (4) to understand the differences in the contribution of determinants of sustainable waste management behavior in a framework that ultimately leads to sustainable waste management behavior. The results obtained from the structural model show fit (fit) based on the value of goodness of fit generated.

The results of this study suggest that knowledge of sustainable waste management not linked to attitudes toward sustainable waste management. These results are not in accordance with the theoretical assumptions of behavioral theory of behavior and are not in line with the findings obtained by Ramayah et al (6) that explored environmentally conscious recycling behavior using behavioral planning theory.

The results of this study suggest that attitudes toward sustainable waste management are not related to the intentions of sustainable waste management behavior. This finding is not in line with the theoretical assumptions in behavioral planning theory (4) that attitudes are the determinants of behavioral intentions.

The results of this study indicate that subjective norms relate and contribute positively to the intent of sustainable waste management. Subjective norms that refer to the perceived social demands for performing or not performing certain behaviors are found to have an effect and contribute positively to the intention to apply sustainable waste management behavior in this study. This result is in line with the theoretical assumption of behavioral planning theory (4) which states that subjective norms as determinant factors for applying or not applying a particular behavior. This result is consistent with the findings of previous researchers who stated that subjective norms have a significant relationship with intentions as reported by some previous researchers.

The results of this study suggest that perceived behavioral control (PBC) is associated with intent to implement sustainable waste management behavior. This finding support the assumption in behavioral planning theory (4) that intentions are influenced by PBC. This result is also in line with the results of Kumar's research (10) which states that PBC has a significant relationship with the intention of buying environmentally friendly products.

Overall, models using a behavioral theory framework are able to explain sustainable behavioral intentions of sustainable waste management with a good approach in a simple and sufficient way for developing countries such as Indonesia. The feasibility of behavioral planning theory is consistent with Kumar's findings (10) and Ramayah et al.(6) This study managed to fill the dearth of research that studies the relationship of environmental knowledge with attitudes towards environmental issues in the context of Indonesia.

## 5 CONCLUSION

Based on the analysis of the determinants of sustainable waste management behavior in high school students in Padang City, it is concluded that knowledge of sustainable waste management is related and contributes positively to the attitude toward sustainable waste management at high school students in Padang City. Attitudes towards sustainable waste management are not related to sustainable waste behavior management intentions at

high school students in Padang City. The subjective norms relate and contribute positively to the sustainable behavior management intentions of high school students in Padang City. Perceived behavioral control is not associated with sustainable waste behavior management intentions in high school students in Padang City.

The results of this study provide theoretical implications and practices of how knowledge influences attitudes toward sustainable waste management behavior behaviors and subjective norms that influence the sustainable behavior of sustainable waste management. In an effort to apply sustainable waste management behaviors to high school students, local governments should consider the determinants of behavioral intent and the constituent indicators.

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