

LAMPIRAN

Lampiran 1 Biodata Peneliti

BIODATA PENELITI



A. Data Pribadi

Nama : Yunita Nur Hija Saputri
Tempat, Tanggal Lahir : Samarinda, 24 Januari 2002
Alamat : Jl. Kemakmuran Gang KNPI

B. Riwayat Pendidikan Formal

Pendidikan Formal

- Tamat SD Tahun : 2013 di SD Negeri 003 Samarinda
- Tamat SMP : 2016 di MTs Negeri Model Samarinda
- Tamat SLTA : 2019 di MAN 2 Samarinda

Tanggal Ujian : 12 Juli 2023

Judul Penelitian :

**ANALISIS FAKTOR RESIKO HIPERTENSI PADA LANSIA DI PUSKESMAS
PASUNDAN SAMARINDA.**

Pembimbing : Lisa Wahidatul Oktaviani, Ph.D

Demikian permohonan pengajuan pengajuan penguji ini saya sampaikan atas perhatiannya saya ucapkan terima kasi.

Wassalamu'alaikum Wr.Wb

Samarinda, 07 Juli 2023

Hormat saya,
Mahasiswa

Yunita Nur Hija Saputri
NIM. 1911102413033

Lampiran 2 Surat Izin Penelitian



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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Nomor : 491/FIK.3/C.3/B/2023
Lampiran : -
Perihal : **Permohonan Izin Penelitian**

Yth.

Kepala Dinas Kesehatan Kota Samarinda
di Tempat

Assalamu 'alaikum Warahmatullahi Wabarakatuh

Dengan hormat teriring salam dan do'a kami haturkan semoga Bapak/Ibu selalu dalam keadaan sehat walafiat.

Sehubungan penyusunan tugas akhir Skripsi Mahasiswa Program Studi S1 Kesehatan Masyarakat, Fakultas Kesehatan Masyarakat, Universitas Muhammadiyah Kalimantan Timur, bersama ini disampaikan permohonan izin penelitian di Puskesmas Pasundan dengan nama mahasiswa berikut :

Nama : Yunitha Nur Hija Saputri
NIM : 1911102413033
Judul Penelitian : Analisis Faktor Resiko Hipertensi Pada Lansia di Puskesmas Pasundan Samarinda


Pelaksanaan waktu kegiatan disesuaikan dengan tempat Bapak/Ibu pimpin. Demikian yang dapat disampaikan, atas perhatian dan kerjasamanya kami mengucapkan terima kasih.

Wassalamu 'alaikum Warahmatullahi Wabarakatuh

Samarinda, 03 Dzulqa'idah 1444 H

23 Mei 2023 M

Ketua Prodi S1 Kesehatan Masyarakat


Nida Amalia, M.PH
NIDN. 1101119301

Tembusan disampaikan kepada:

1. Mahasiswa yang bersangkutan
2. Arsip

Lampiran 3 Surat Balasan Penelitian



PEMERINTAH KOTA SAMARINDA
DINAS KESEHATAN
UPTD PUSKESMAS PASUNDAN

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Lamp : -
Hal : Surat Keterangan Selesai Penelitian

Kepada
Muhammadiyah Kalimantan Timur
di -
Samarinda

Yang bertanda tangan di bawah ini :

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N I P : 197710181998032002
Pangkat/Golongan : Penata Tk. I - III/d
Jabatan : Kepala Sub Bag Tata Usaha Puskesmas Pasundan

Menerangkan bahwa:

N a m a : Yunitha Nur Hija Saputri
N I P : 1911102413033
Program Studi : S1 Kesehatan Masyarakat

Benar telah mengadakan penelitian di UPTD Puskesmas Pasundan mulai tanggal 03 Juni 2023 s/d 24 Juni 2023 dengan judul penelitian "Analisis Faktor Resiko Hipertensi Pada Lansia Di Puskesmas Pasundan Samarinda".

Demikian surat keterangan ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

Samarinda, 07 Juli 2023
Kepala UPTD Puskesmas Pasundan

drg. Aprilia Rajati, M.M.
Pembina Tk. I/ IVb
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Lampiran 4 Kuesioner Penelitian

KUESIONER PENELITIAN SURAT PERSETUJUAN (INFORMED CONSENT)

Kepada Yth. Responden

Di Tempat.

Dengan Hormat,

Saya Mahasiswi Program Studi S1 Kesehatan Masyarakat Universitas Muhammadiyah Kalimantan Timur.

Nama : Yunita Nur Hija Saputri

NIM : 1911102413033

Bermaksud akan melakukan penelitian mengenai “Analisis Faktor Resiko Hipertensi Pada Lansia di Puskesmas Pasundan Samarinda”. Segala informasi yang anda berikan akan dijamin kerahasiaannya dan saya bertanggung jawab apabila informasi yang diberikan akan merugikan saudara/i. Sehubungan dengan hal tersebut, apabila saudara/i setuju untuk ikut serta dalam penelitian ini mohon untuk menandatangani kolom yang disediakan.

Atas kesediaannya saya ucapkan terima kasih.

Samarinda,.....

Responden,

(.....)

A. Identitas Responden

1. Nama Responden :.....
2. Usia :.....
3. Jenis Kelamin : Perempuan/Laki-laki (Lingkari jawaban yang benar)
4. Pendidikan :
5. Pekerjaan :
6. Status Asuransi : Memiliki/ Tidak (Lingkari jawaban yang Kesehatan benar)

B. Perilaku Merokok

Untuk bagian ini diisi oleh responden. Berikan tanda (x) untuk jawaban yang sesuai dengan keadaan anda

1. Bagaimana perilaku merokok Bapak/Ibu saat ini?
 - a. Perokok harian (Merokok 1 batang sehari)
 - b. Sese kali merokok (Merokok kurang dari 1 batang sehari)
 - c. Mantan perokok
 - d. Bukan perokok
2. Apakah Bapak/Ibu pernah merokok sebanyak 100 batang selama hidup?
 - a. Ya
 - b. Tidak
3. Pada usia berapa Bapak/Ibu pertama kali merokok ?
..... Tahun

4. Jika Bapak/Ibu mantan perokok, berapa lama berhenti merokok?

..... Hari Bulan Tahun

D. Sedentary Behavior

Klasifikasi Aktivitas

Jenis Aktivitas	Contoh Aktivitas
Aktivitas/kerja ringan	Duduk, berdiri, mencuci piring, memasak, menyetrika, bermain musik, menonton tv, mengemudikan kendaraan, berjalan perlahan.
Aktivitas/kerja sedang	Mengepel lantai, mencuci kendaraan, menanam tanaman, bersepeda, berjalan cepat dan sedang.
Aktivitas/kerja berat	Membawa barang berat, berkebun, berlari

Pertanyaan	Responden	Kode
Aktivitas saat bekerja		
1	Apakah dalam pekerjaan sehari – hari Bapak/Ibu, melakukan aktivitas/kerja berat minimal 10 menit per hari?	Ya (Lanjut ke no 2) Tidak (Lanjut ke no 4) P1
	2		Berapa hari dalam seminggu Bapak/Ibu melakukan aktivitas/kerja berat?	..... Hari P2
3	Berapa lama dalam 1 hari, Bapak/Ibu melakukan	.....Jam, .....Menit P3

Pertanyaan		Responden	Kode
	aktivitas/kerja berat , minimal 10 menit per hari?		
4	Apakah dalam pekerjaan Bapak/Ibu melakukan aktivitas/kerja sedang ?	Ya Tidak (Lanjut ke no 7)	P4
5	Berapa hari dalam seminggu Bapak/Ibu melakukan aktivitas/kerja sedang?	..... Hari	P5
6	Berapa lama dalam 1 hari biasanya Bapak/Ibu melakukan aktivitas/kerja sedang ?	.....jam, .....Menit	P6
Perjalanan dari tempat ke tempat lainnya dengan sepeda atau berjalan kaki			
7	Apakah Bapak/Ibu berjalan kaki atau bersepeda, minimal 10 menit setiap harinya untuk pergi ke suatu tempat?	Ya Tidak (Lanjut ke no 10)	P7
8	Berapa hari dalam seminggu Bapak/Ibu berjalan kaki atau bersepeda (minimal 10 menit) untuk pergi ke suatu tempat ?	.....Hari	P8
9	Berapa lama dalam 1 hari biasanya Bapak/Ibu berjalan kaki atau bersepeda untuk pergi ke suatu tempat ?	.....Jam, .....Menit	P9

Pertanyaan	Responden	Kode	
Aktivitas Rekreasi			
10	Apakah Bapak.Ibu melakukan olahraga atau rekreasi yang merupakan aktivitas/kerja berat minimal 10 menit per hari?	Ya Tidak (Lanjut ke no 13)	P10
11	Berapa hari dalam seminggu biasanya Bapak/Ibu melakukan olahraga atau rekreasi yang merupakan aktivitas/kerja berat ?	.....Hari	P11
12	Berapa lama Bapak/Ibu melakukan olahraga atau rekreasi yang merupakan aktivitas/kerja berat dalam 1 hari ?	.....Jam, .....Menit	P12
13	Apakah Bapak/Ibu melakukan olahraga atau rekreasi yang tergolong seperti : berjalan cepat, bersepeda, mengepel lantai yang merupakan aktivitas/kerja sedang minimal 10 menit per hari ?	Ya Tidak (Lanjut no 16)	P13
14	Berapa hari dalam seminggu Bapak/Ibu melakukan olahraga atau rekreasi yang tergolong seperti : berjalan cepat, bersepeda, mengepel lantai ?	.....Hari	P14
15	Berapa lama Bapak/ibu Bapak/Ibu melakukan olahraga atau rekreasi yang tergolong seperti : berjalan	.....Jam, .....Menit	P15

Pertanyaan		Responden	Kode
	cepat, bersepeda, mengepel lantai dalam 1 hari ?		
Aktivitas yang tidak memerlukan banyak gerak seperti duduk dan berbaring (<i>sedentary behavior</i>)			
16	Berapa lama Bapak/Ibu duduk/berbaring seperti : duduk saat membaca Al Quran, duduk/berbaring di kamar, duduk di teras, duduk saat menonton TV, dan duduk saat mengobrol bersama tetangga dalam 1 hari ?	.....Jam, .....Menit	P16

Lampiran 5 Output SPSS

Analisis Univariat

JK

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-laki	13	13.0	13.0	13.0
	Perempuan	87	87.0	87.0	100.0
	Total	100	100.0	100.0	

Kategori Usia Responden

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60-75	98	98.0	98.0	98.0
	>75	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

SA_ Kesehatan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tidak Memiliki	3	3.0	3.0	3.0
	Memiliki	97	97.0	97.0	100.0
	Total	100	100.0	100.0	

HIPERTENSI

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tidak	54	54.0	54.0	54.0
	Ya	46	46.0	46.0	100.0
	Total	100	100.0	100.0	

Kategori Pekerjaan Responden

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bekerja	16	16.0	16.0	16.0
	Tidak	84	84.0	84.0	100.0
	Total	100	100.0	100.0	

Kategori Pendidikan Responden

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sekolah	88	88.0	88.0	88.0
	Tidak	12	12.0	12.0	100.0
	Total	100	100.0	100.0	

Status Merokok Responden

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tidak	89	89.0	89.0	89.0
	Ya	11	11.0	11.0	100.0
	Total	100	100.0	100.0	

kategori sedentary responden

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Tidak	57	57.0	57.0	57.0
	Ya	43	43.0	43.0	100.0
	Total	100	100.0	100.0	

Kategori IMT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Normal	44	44.0	44.0	44.0
	Kurus	7	7.0	7.0	51.0
	Gemuk	32	32.0	32.0	83.0
	Obesitas	17	17.0	17.0	100.0
	Total	100	100.0	100.0	

Analisis Multivariat

Seleksi Bivariat

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.013	1	.909
	Block	.013	1	.909
	Model	.013	1	.909

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	1.436	1	.231
	Block	1.436	1	.231
	Model	1.436	1	.231

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	14.254	1	.000
	Block	14.254	1	.000
	Model	14.254	1	.000

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.561	1	.454
	Block	.561	1	.454
	Model	.561	1	.454

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	1.436	1	.771
	Block	1.436	1	.771
	Model	1.436	1	.771

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.561	1	.464
	Block	.561	1	.464
	Model	.561	1	.464

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	.088	1	.767
	Block	.088	1	.767
	Model	.088	1	.767

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	36.813	6	.000
	Block	36.813	6	.000
	Model	36.813	6	.000

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	Jenis kelamin(1)	-.796	1.507	.279	1	.598	.451	.024	8.656
	Status Merokok Responden(1)	-1.051	1.739	.365	1	.546	.350	.012	10.561
	Kategori IMT			10.972	3	.012			
	Kategori IMT(1)	-20.102	14967.904	.000	1	.999	.000	.000	.
	Kategori IMT(2)	1.223	.522	5.486	1	.019	3.399	1.221	9.463
	Kategori IMT(3)	2.572	.867	8.799	1	.003	13.087	2.393	71.576
	kategori sedentary responden(1)	1.016	.503	4.075	1	.044	2.763	1.030	7.411
	Constant	-.508	1.482	.118	1	.732	.602		
Step 2 ^a	Status Merokok Responden(1)	-.268	.910	.087	1	.768	.765	.129	4.550
	Kategori IMT			10.747	3	.013			
	Kategori IMT(1)	-20.139	14960.655	.000	1	.999	.000	.000	.
	Kategori IMT(2)	1.178	.514	5.258	1	.022	3.249	1.187	8.894
	Kategori IMT(3)	2.522	.861	8.577	1	.003	12.455	2.303	67.359
	kategori sedentary responden(1)	1.035	.502	4.261	1	.039	2.816	1.054	7.527
	Constant	-1.266	.388	10.632	1	.001	.282		
	Step 3 ^a	Kategori IMT			10.694	3	.013		
Kategori IMT(1)		-20.301	14884.357	.000	1	.999	.000	.000	.
Kategori IMT(2)		1.167	.512	5.194	1	.023	3.213	1.178	8.768
Kategori IMT(3)		2.504	.858	8.529	1	.003	12.235	2.279	65.697
kategori sedentary responden(1)		1.046	.501	4.358	1	.037	2.846	1.066	7.600
Constant		-1.285	.383	11.228	1	.001	.277		

a. Variable(s) entered on step 1: Jenis kelamin, Status Merokok Responden, Kategori IMT, kategori sedentary responden.

RESEARCH

Open Access



Predicting hypertension by obesity- and lipid-related indices in mid-aged and elderly Chinese: a nationwide cohort study from the China Health and Retirement Longitudinal Study

Yuqing Li¹, Jiaofeng Gui¹, Xiaoyun Zhang¹, Ying Wang¹, Yujin Mei¹, Xue Yang¹, Haiyang Liu², Lei-lei Guo³, Jinlong Li⁴, Yunxiao Lei⁵, Xiaoping Li⁶, Lu Sun⁶, Liu Yang⁷, Ting Yuan⁵, Congzhi Wang⁷, Dongmei Zhang⁸, Huanhuan Wei⁵, Jing Li⁹, Mingming Liu⁹, Ying Hua¹⁰ and Lin Zhang^{7*}

Abstract

Background Currently, the study outcomes of anthropometric markers to predict the risk of hypertension are still inconsistent due to the effect of racial disparities. This study aims to investigate the most effective predictors for screening and prediction of hypertension (HTN) in the Chinese middle-aged and more elderly adult population and to predict hypertension using obesity and lipid-related markers in Chinese middle-aged and older people.

Methods The data for the cohort study came from the China Health and Retirement Longitudinal Study (CHARLS), including 4423 middle-aged and elderly people aged 45 years or above. We examined 13 obesity- and lipid-related indices, including waist circumference (WC), body mass index (BMI), waist-height ratio (WHtR), visceral adiposity index (VAI), a body shape index (ABSI), body roundness index (BRI), lipid accumulation product index (LAP), conicity index (CI), Chinese visceral adiposity index (CVAI), triglyceride-glucose index (TyG-index) and their combined indices (TyG-BMI, TyG-WC, TyG-WHtR). To compare the capacity of each measure to forecast the probability of developing HTN, the receiver operating characteristic curve (ROC) was used to determine the usefulness of anthropometric indices for screening for HTN in the elderly and determining their cut-off value, sensitivity, specificity, and area under the curve (AUC). Association analysis of 13 obesity-related anthropometric indicators with HTN was performed using binary logistic regression analysis.

Results During the four years, the incident rates of HTN in middle-aged and elderly men and women in China were 22.08% and 17.82%, respectively. All the above 13 indicators show a modest predictive power (AUC > 0.5), which is significant for predicting HTN in adults (middle-aged and elderly people) in China ($P < 0.05$). In addition, when WHtR = 0.501 (with an AUC of 0.593, and sensitivity and specificity of 63.60% and 52.60% respectively) or TyG-WHtR = 4.335 (with an AUC of 0.601, and sensitivity and specificity of 58.20% and 59.30% respectively), the effect of predicting the incidence risk of men is the best. And when WHtR = 0.548 (with an AUC of 0.609, and sensitivity and

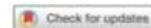
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OPEN Prevalence and risk factors of hypertension among college freshmen in China

Qingqing Jiang¹, Qiumei Zhang², Tiantian Wang¹, Qiqi You¹, Chun Liu^{3,4} & Shiya Cao^{1,5}



Hypertension is the leading single contributor to all-cause death and disability worldwide. However, there is scarce evidence on the prevalence and risk factors of hypertension for Chinese youth. This study aimed to investigate the prevalence of hypertension among Chinese college freshmen and to identify the influencing factors. We conducted a cross-sectional study of all freshmen from 2015 to 2017 at a university in Wuhan, China by physical examination and standard-structured questionnaire. The Pearson chi-square test was used to compare categorical variables. Forward stepwise logistic regression method was used in the multivariate analysis to identify independent predictors of hypertension in youth. A total of 12,849 participants were included, and the prevalence of hypertension of Chinese college freshmen was 4.3% (7.9% in men and 1.6% in women). Men had a higher risk of hypertension than women (odds ratio [OR]: 5.358, 95% confidence interval [CI]: 4.345–6.607, $P < 0.001$). Obese people were more likely to develop hypertension than those with normal body mass index (OR: 10.465, 95% CI: 8.448–12.964, $P < 0.001$). People with elevated resting heart rate (RHR) had a higher prevalence of hypertension (OR: 4.987, 95% CI: 3.641–6.832, $P < 0.001$). Staying up late (OR: 2.957, 95% CI: 2.482–3.523, $P < 0.001$), physical inactivity (OR: 4.973, 95% CI: 4.141–5.972, $P < 0.001$), living in urban district (OR: 1.864, 95% CI: 1.493–2.329, $P < 0.001$) and family history of cardiovascular diseases (CVDs) (OR: 2.685, 95% CI: 2.108–3.421, $P < 0.001$) were related to higher prevalence of hypertension in youth. Male, obesity, elevated RHR, physical inactivity and family history of CVDs were identified as important risk factors of hypertension in youth. These risk factors should be given more attention when designing and implementing the interventional programs.

Cardiovascular diseases (CVDs, including coronary heart disease, heart failure, stroke, myocardial infarction and atrial fibrillation etc.) are the most common non-communicable diseases globally and responsible for estimated 17.9 million deaths each year^{1,2}, which caused an increasing burden to the society and families. Although CVDs are usually detected in the elderly, the disease development process that cannot be observed obviously may occur at a younger age, and there is an increasing tendency of mortality among the young^{3,4}. Hypertension, as the most common preventable risk factor for CVDs, is the leading single contributor to all-cause death and disability worldwide⁵. Increasing studies have provided ample evidence that some adult hypertension develops in childhood, meaning that children and adolescents with elevated blood pressure tend to end up as adults with recognizable hypertension^{6,7}. From a public health point of view, the prevention and control of hypertension are essential to maintain and promote human health, particularly in childhood.

In China, the prevalence of hypertension among youth rose from 1.6%⁸ in 2004 to 4.0%⁹ in 2015, but there is scarce evidence on the prevalence and risk factors of hypertension for Chinese youth. The aim of the cross-sectional study was to investigate the prevalence of hypertension of college freshmen as well as its influencing factors, which would provide scientific bases for the primary prevention of CVDs. We hope to awaken the students' attention to take active measures to keep their blood pressure within the normal range.

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Role of health insurance and neighborhood-level social deprivation on hypertension control following the affordable care act health insurance opportunities

[Angier H](#)^a  , [Green BB](#)^b, [Fankhauser K](#)^a, [Marino M](#)^c, [Huguet N](#)^a, [Larson A](#)^d, [DeVoe JE](#)^a

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<https://doi.org/10.1016/j.socscimed.2020.113439> 

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Abstract

Objectives

To understand if neighborhood-level social deprivation moderates the association between gaining health insurance and improved hypertension control.

RISK FACTORS FOR ELDERLY'S HYPERTENSION IN SOUTH TANGERANG, INDONESIA: A CASE CONTROL STUDY

Andriyani¹, Atik Kridawati², Cicilia Winda Yaningsih³, Tri Budi Rahardjo⁴, Nurmalia Lusida⁵, Dina Rahma Fadlilah⁶, Tria Astika Endah Permatasari⁷, Ernyasih⁸, Munaya Fauziah⁹, Triana Srisantyorini¹⁰

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ABSTRACT

Hypertension is a serious problem around the world. This is due to the high prevalence of hypertension and tend to increase in the future. This study aimed to determine factors associated with hypertension in elderly lived in South Tangerang, Indonesia. This study is a case control (age matched at the 1:1 ratio) and based on an elderly population that was conducted in South Tangerang, Indonesia in 2019. Along with the descriptive statistics, chi square analysis and logistic regression model was done using SPSS to calculate the odds ratio. Multivariate analysis obtained the highest Odds Ratio (OR) value were the variable use of contraception before menopause (OR = 3,149). The multivariate summary analysis model with the value of R square = 0,577, it means that the variable use of contraception can explain 57,7% variable hypertension. And there 42,3% variables or other factors that were not studied to explain the hypertension variable in the elderly at the South Tangerang, Banten, Indonesia. Variable of contraceptive use is the determinant risk factor in the incidence of hypertension in elderly after controlling by family history variables, habit of consuming salty food, habit of consuming saturated fat, habit of physical activity, stress, and age. By that results, women of childbearing age in Indonesia especially South Tangerang should use contraceptives that do not affect hormones, including IUD (Intra Uterine Device) contraception and condoms.

Keywords: Risk Factor, Elderly, Hypertension.

I. INTRODUCTION

Indonesia is currently undergoing an epidemiological transition in line with demographic and technological transition. This also contributes to the emergence of causes as the main factors of morbidity and mortality, from infectious diseases which are generally caused by disease-carrying agents to non-communicable diseases (NCD) that caused by human behaviour and degenerative factors.¹ NCD is the main cause of death in developed countries.² The death rate caused by NCD in Indonesia according to World Health Organization (WHO) in 2008 was 647 per 100,000 population.³ Hypertension is one of the NCD in Indonesia which is most at risk of causing death. The Ministry of Health Republic of Indonesia stated that hypertension is the third highest cause of death in Indonesia with a Case Fatality Rate (CFR) of 4.81%.⁴

The prevalence of hypertension in the world tend to increase as a result of the increasing population of the elderly over 80 years, which has exponentially increased over the last 40 years, especially in developing countries.⁵ Studies conducted at Framingham showed that increasing age indicates the development of hypertension in about 91% to 93%.⁶ Approximately one in four adults in America has hypertension.

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Original Article

Gender Differences in Health-Related Behavior Patterns among Older Adults in Indonesia: A Latent Class Analysis

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SUMMARY

Background: Health-related behavior patterns may affect health outcomes. However, there is little research for about health-related behavior patterns in Southeast Asia. The purpose of this study was to identify health-related behavior patterns among older adults in Indonesia and to examine the factors.

Methods: The data were obtained from the fifth wave of the Indonesia Family Life Survey collected in 2015. Adults who were age 60 or older were included (n = 2930). Health-related behaviors included smoking, physical activity, and dietary patterns. The data was analyzed using latent class analysis and logistic regression.

Results: Four classes each for older men were identified: smoking and high-calorie diet (20.8%), smoking and active (47.5%), nonsmoking (2.5%), and smoking and healthy diet (29.1%). Four classes for older women were also identified: high risk (8.8%), inactive (31.0%), moderate physical activity (37.7%), and healthy diet (22.5%). The related factors were different by gender.

Conclusion: Four lifestyles for older men and women respectively were identified. No completely healthy behavior group was identified. Gender differences imply that health inequality may exist. A gender-sensitive policy is suggested.

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1. Introduction

Health-related behaviors (HRB) are related to health outcomes, such as mortality, chronic disease morbidity and mental health, especially for the older people.^{1–3} A healthy lifestyle is defined as “collective patterns of health-related behavior based on choices from options available to people according to their life chances”.⁴ The most common HRBs are smoking, drinking alcohol, physical activity, and dietary patterns.⁵ The person-centered methods are often used to identify different HRB patterns and to group individuals,^{6–12} and the common groups reported in the existing research include healthy groups and multiple risk behavior groups.¹³ However, the HRB patterns are little explored in Southeast Asia. Furthermore, the gender differences in the HRB patterns based on the role expectation in the culture may cause different risks to health outcomes for older people.

The factors that influence HRBs include age, gender, ethnicity, education, socioeconomic status, physical health and mental health.^{9–15} Gender differences in HRBs can be explained by the knowledge gap or health literacy differences, differences in health beliefs, social role differences, and social disparities due to gender. Men are more likely to smoke and drink alcohol, whereas women had more risks in physical inactivity and unhealthy diet.^{7,8,13} Higher socioeconomic status and education are often related to HRBs.^{9–15} Social par-

ticipation or social engagement are also factors related to HRBs.¹⁶

The percentage of people who were age 60 years old or more has reached almost 9.0% of the population in Indonesia.¹⁷ The high rate of smoking, low physical activity, and consuming fried food are noticed in the lifestyle for older adults.¹⁸ Despite HRBs and related factors being explored in previous research, HRBs as a lifestyle pattern for older people in Southeast have not been identified yet. The purpose of this study was to identify different HRB lifestyle patterns by gender for older adults in Indonesia and to examine related factors.

2. Materials and methods

2.1. Data and sample

The data were obtained from the Indonesia Family Life Survey (IFLS)¹⁹ from the RAND corporation, a nationally representative survey. The sampling for the IFLS was based on sampling households from the Indonesian population since 1993. Data collection was conducted by face-to-face interviews. In this study, we used the fifth wave of IFLS and selected older participants who were at least 60 years old. In total 2930 participants were included for analysis. The study was approved by the Institutional Review Board before the study was conducted (TMU-JIRB No. N202004087).

2.2. Measures

The HRB consisted of 3 kinds of behaviors: smoking, physical

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Lampiran 7 Lembar Konsultasi

LEMBAR KONSULTASI

Nama : Yunitha Nur Hija Saputri
 NIM : 1911102413033
 Judul Penelitian : Analisis Faktor Resiko Hipertensi Pada Lansia di Puskesmas Pasundan Samarinda

No	Tanggal	Konsultasi	Hasil Konsultasi	Paraf
1.	Senin, 11 November 2022	- Penjelasan KDM - Sistematika Penulisan	- Pembagian kelompok - Pengajuan judul	
2.	Senin, 12 Desember 2022	Konsultasi Pengajuan Judul	- Perubahan Judul	
3.	Senin, 16 Januari 2023	Konsultasi Penulisan Bab II	- Penetapan desain penelitian - Penetapan tempat penelitian	
4.	Abu, 08 Maret 2023	Konsultasi full proposal	- Revisi latar belakang - Menambatkan gap penelitian	
5.	Senin, 20 Februari 2023	Konsultasi tempat penelitian dan perubahan variabel	- Tempat penelitian di Puskesmas Pasundan - Menghapus variabel	
6.	Selasa, 14 Maret 2023	Konsultasi Revisi proposal	Proposal ACC	
7.	Senin, 31 Maret 2023	Konsultasi hipotesis dan uji statistik	- Revisi hipotesis - Penambahan variabel secondary	
8.	Senin, 26 Juni 2023	Konsultasi data penelitian	- Revisi coding	
9.	Senin, 01 Juli 2023	Konsultasi full Skripsi	- Revisi Tujuan khusus & kesimpulan	
10.	Senin, 10 Juli 2023	Konsultasi full Skripsi	ACC	

Lampiran 8 Dokumentasi



Lampiran 9 Hasil Uji Turnitin

**ANALISIS FAKTOR RESIKO
HIPERTENSI PADA LANSIA DI
PUSKESMAS PASUNDAN
SAMARINDA**

by Yunitha Nur Hija Saputri

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