

## CHAPTER V

### CONCLUSIONS AND SUGGESTIONS

#### 1.1 Conclusion

Based on the results of logistic regression carried out regarding the health status of individuals in Indonesia, it can be concluded that there are significant factors that affect the health status of individuals, variable working hours have a negative influence on health status.

In general, individuals with a higher level of education have a greater chance of being healthy. Other factors such as male sex have a higher level of health status than women, this shows that individual productivity also affects health status, variables to the demographics of residence also have a significant effect on health status, individuals who are in the city are healthier than individuals who live in the village, this proves that there is an unequal health facility between the city and the village, that in the city there are more and more sophisticated health facilities in the countryside.

The variable of health insurance ownership does not have a significant influence on health status, this allows the same probability to occur between individuals who have health insurance and individuals who do not have health insurance.

#### 1.2 Suggestion

Based on the results of the data analysis, here are some recommendations that can be considered:

1. Further research can deepen the analysis by considering other variables that may have an effect, such as the variables of consumption, employment, expenditure and income, this can provide a more comprehensive picture of the factors that affect the health status of individuals in Indonesia.

2. Further research can use different research methods, consider using different research methods, such as qualitative research or experimental research, to understand the factors that affect the status of health in Indonesia.
3. Further research can also export the effectiveness of policies in the health sector, debriefing by directing people to live a healthier life, nutritious food and maintaining cleanliness, and also later provide an overview to the government of the state of health status in Indonesia is still very concerning, with the uneven health status in Indonesia.



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## APPENDIX

### Appendix 1 the percentage of population with health complaints

Province	Percentage of population with health complaints in the last month by province % (2020)
Aceh	27,12
Sumatera Utara	26,12
Sumatera Barat	31,09
Riau	24,66
Jambi	21,63
Sumatera Selatan	29,32
Bengkulu	30,23
Lampung	31,35
Kep. Bangka Belitung	31,25
Kep. Riau	18,21
DKI. Jakarta	33,80
Jawa Barat	32,04
Jawa Tengah	35,63
DI Yogyakarta	38,07
Jawa Timur	32,80
Banten	32,22
Bali	25,48
Nusa Tenggara Barat	44,00
Nusa Tenggara Timur	34,44
Kalimantan Barat	25,84
Kalimantan Tengah	26,44
Kalimantan Selatan	34,88
Kalimantan Timur	22,65
Kalimantan Utara	26,04
Sulawesi Utara	24,98
Sulawesi Tengah	26,16
Sulawesi Selatan	28,91
Sulawesi Tenggara	29,23
Gorontalo	32,19
Sulawesi Barat	26,29
Maluku	18,55

Maluku Utara	15,97
Papua Barat	21,43
Papua Barat Daya	-
Papua	16,27
Papua Selatan	-
Papua Tengah	-
Papua Pegunungan	-
Indonesia	30,96

Source: [ntt.bps.go.id](http://ntt.bps.go.id)

#### Appendix 2 population by province in Indonesia (thousand), 2020

Province	Population by province in Indonesia (thousand)
Aceh	5 274,9
Sumatera Utara	14 799,4
Sumatera Barat	5 534,5
Riau	6 394,1
Jambi	3 548,2
Sumatera Selatan	8 467,4
Bengkulu	2 010,7
Lampung	9 007,8
Kep. Bangka Belitung	1 455,7
Kep. Riau	2 064,6
DKI. Jakarta	10 562,1
Jawa Barat	48 274,2
Jawa Tengah	36 516,0
DI Yogyakarta	3 668,7
Jawa Timur	40 665,7
Banten	11 904,6
Bali	4 317,4
Nusa Tenggara Barat	5 320,1
Nusa Tenggara Timur	5 325,6
Kalimantan Barat	5 414,4
Kalimantan Tengah	2 670,0
Kalimantan Selatan	4 073,6
Kalimantan Timur	3 766,0
Kalimantan Utara	701,8
Sulawesi Utara	2 621,9
Sulawesi Tengah	2 985,7
Sulawesi Selatan	9 073,5
Sulawesi Tenggara	2 624,9
Gorontalo	1 171,7
Sulawesi Barat	1 419,2
Maluku	1 848,9
Maluku Utara	1 282,9

Papua Barat	1 134,1
Papua	4 303,7
Indonesia	270 203,9

Source: [ntt.bps.go.id](http://ntt.bps.go.id)

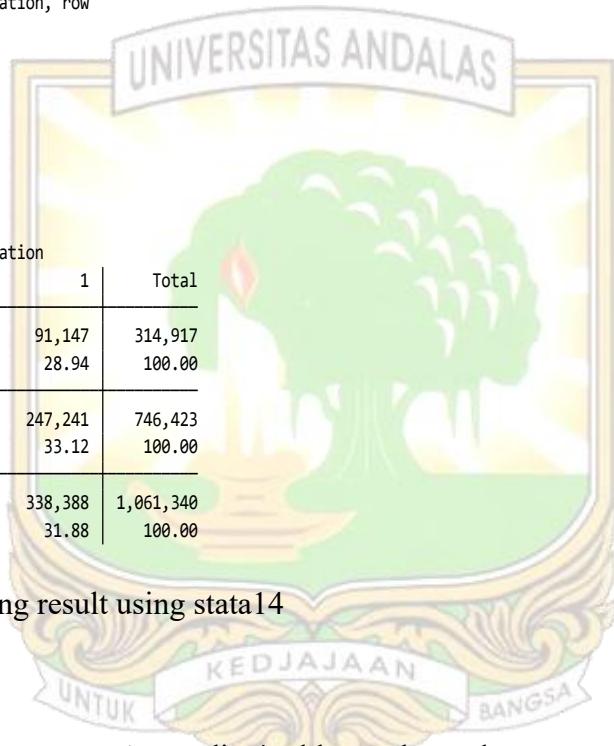
### Appendix 3 table results education

. tab healthstatus education, row

Key	
<i>frequency</i> <i>row percentage</i>	

healthstat us	education		Total
	0	1	
0	223,770 71.06	91,147 28.94	314,917 100.00
1	499,182 66.88	247,241 33.12	746,423 100.00
Total	722,952 68.12	338,388 31.88	1,061,340 100.00

Source: processing result using stata14



### Appendix 4 table result gender

. tab healthstatus gender , row

Key
frequency row percentage

healthstat us	gender		Total
	0	1	
0	194,406 52.30	177,296 47.70	371,702 100.00
1	421,935 48.71	444,309 51.29	866,244 100.00
Total	616,341 49.79	621,605 50.21	1,237,946 100.00

Resource: processing result using stata14

Appendix 5 table result health insurance

. tab healthstatus JKN, row

Key
frequency row percentage

healthstat us	JKN		Total
	0	1	
0	118,023 31.75	253,679 68.25	371,702 100.00
1	275,800 31.84	590,444 68.16	866,244 100.00
Total	393,823 31.81	844,123 68.19	1,237,946 100.00

Resource: processing result using stata14

## Appendix 6 table result demographic

. tab healthstatus demographic , row

Key
<i>frequency</i> <i>row percentage</i>

healthstat us	demographic		Total
	0	1	
0	224,006 60.26	147,696 39.74	371,702 100.00
1	502,848 58.05	363,396 41.95	866,244 100.00
Total	726,854 58.71	511,092 41.29	1,237,946 100.00

Resource: processing result using Stata14

## Appendix 7 table result working hours

. tab healthstatus workinghours , row

Key
<i>frequency</i> <i>row percentage</i>

healthstat us	workinghours		Total
	0	1	
0	104,823 59.87	70,256 40.13	175,079 100.00
1	251,047 63.39	145,014 36.61	396,061 100.00
Total	355,870 62.31	215,270 37.69	571,140 100.00

Resource: processing result using Stata14

## Appendix 8 Logistic Regression

```
. logit healthstatus education gender JKN demographic workinghours

Iteration 0:  log likelihood = -336579.61
Iteration 1:  log likelihood = -334189.44
Iteration 2:  log likelihood = -334185.55
Iteration 3:  log likelihood = -334185.55

Logistic regression                                         Number of obs = 544,954
                                                               LR chi2(5) = 4788.11
                                                               Prob > chi2 = 0.0000
                                                               Pseudo R2 = 0.0071
Log likelihood = -334185.55
```

healthstatus	Coefficient	Std. err.	z	P> z	[95% conf. interval]
education	.2638268	.0062165	42.44	0.000	.2516426 .2760109
gender	.2347507	.006141	38.23	0.000	.2227147 .2467868
JKN	-.0057276	.0065356	-0.88	0.381	-.0185371 .0070819
demographic	.1163775	.0062609	18.59	0.000	.1041064 .1286486
workinghours	-.0969669	.0062258	-15.57	0.000	-.1091692 -.0847645
_cons	.5465698	.0080208	68.14	0.000	.5308493 .5622903

Resource: processing result using Stata14

## Appendix 9 goodness fit

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. estat gof

Goodness-of-fit test after logistic model
Variable: healthstatus

Number of observations = 544,954
Number of covariate patterns = 32
Pearson chi2(26) = 409.04
Prob > chi2 = 0.0000
```

Resource: processing result using Stata14

## Appendix 10 Odds ratio

```

. logit healthstatus education gender JKN demographic workinghours, ro or

Iteration 0:  log pseudolikelihood = -336579.61
Iteration 1:  log pseudolikelihood = -334189.44
Iteration 2:  log pseudolikelihood = -334185.55
Iteration 3:  log pseudolikelihood = -334185.55

Logistic regression                                         Number of obs = 544,954
                                                               Wald chi2(5)  = 4755.58
                                                               Prob > chi2  = 0.0000
                                                               Pseudo R2    = 0.0071

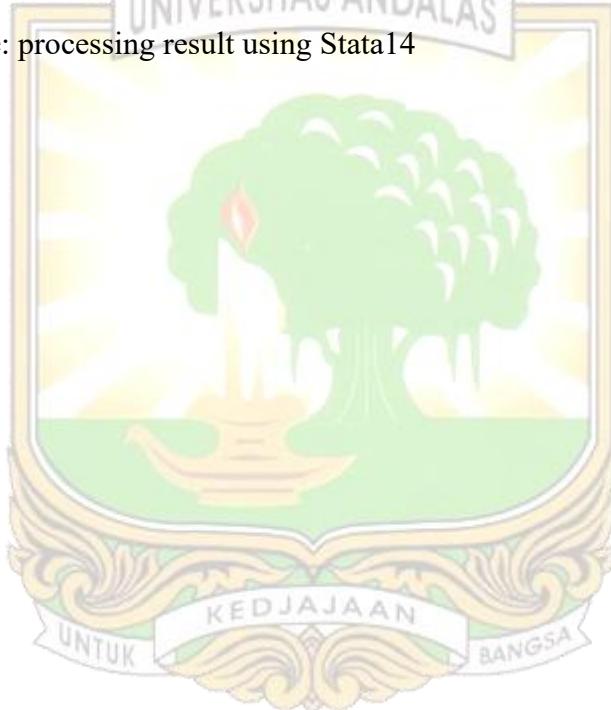
Log pseudolikelihood = -334185.55

```

healthstatus	Robust					
	Odds ratio	std. err.	z	P> z	[95% conf. interval]	
education	1.301903	.0081214	42.29	0.000	1.286082	1.317918
gender	1.264594	.0077622	38.24	0.000	1.249471	1.279899
JKN	.9942888	.0065041	-0.88	0.381	.9816223	1.007119
demographic	1.12342	.0070661	18.50	0.000	1.109656	1.137355
workinghours	.9075861	.0056625	-15.54	0.000	.8965553	.9187525
_cons	1.727318	.0138688	68.07	0.000	1.700348	1.754715

Note: `_cons` estimates baseline odds.

Resource: processing result using Stata14



### Appendix 11 marginal effect

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. mfx
```

```

Marginal effects after logit
y = Pr(healthstatus) (predict)
= .69351987

```

variable	dy/dx	Std. err.	z	P> z	[ 95% C.I. ]	x
educat~n*	.0556138	.0013	42.74	0.000	.053063 .058164	.427187
gender*	.0504623	.00133	37.89	0.000	.047852 .053073	.633822
JKN*	-.0012168	.00139	-0.88	0.381	-.003939 .001506	.713431
demogr~c*	.0246357	.00133	18.58	0.000	.022037 .027234	.413598
workin~s*	-.0207112	.00134	-15.47	0.000	-.023335 -.018087	.365935

(\*) dy/dx is for discrete change of dummy variable from 0 to 1

Resource: processing result using Stata14

