## **Epidemiology & Infection**

## Barriers to vaccine acceptance in adult population of mainland Finland,

## 2021

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## Supplementary material

Table S1 Data collected from Fimea's Medicine Barometer 2021: Background information and statements

ORIGINAL STATEMENT	ORIGINAL ANSWER OPTIONS	MODIFIED STATEMENT	MODIFIED ANSWER CATEGORIES
Everyone should get	1 I completely agree		0 Agree (1 and 2)
vaccinated according to the	2 I somewhat agree		1 Disagree (3 and 4)
national vaccination schedule	3 I somewhat disagree		
	4 I completely disagree		
	5 I can´t say		
Vaccines are safe	1 I completely agree		0 Agree (1 and 2)
	2 I somewhat agree		1 Disagree (3 and 4)
	3 I somewhat disagree		
	4 I completely disagree		
	5 I can´t say		
Vaccination is a good way to	1 I completely agree		0 Agree (1 and 2)
protect against disease	2 I somewhat agree		1 Disagree (3 and 4)
	3 I somewhat disagree		
	4 I completely disagree		
	5 I can´t say		
I have enough information	1 I completely agree		0 Agree (1 and 2)
about VPDs	2 I somewhat agree		1 Disagree (3 and 4)
	3 I somewhat disagree		
	4 I completely disagree		
	5 I can´t say		
I have enough information	1 I completely agree		0 Agree (1 and 2)
about vaccines	2 I somewhat agree		1 Disagree (3 and 4)

	3 I somewhat disagree		
	4 I completely disagree		
	5 I can´t say		
Vaccination contradicts with	1 I completely agree	Vaccination does not	0 Agree (3 and 4)
my way of thinking	2 I somewhat agree	contradict with my way	1 Disagree (1 and 2)
	3 I somewhat disagree	of thinking	
	4 I completely disagree		
	5 I can't say		
Anti-vaccination is a big	1 I completely agree		0 Agree (1 and 2)
problem in Finland	2 I somewhat agree		1 Disagree (3 and 4)
	3 I somewhat disagree		
	4 I completely disagree		
	5 I can't say		
The media deals with	1 I completely agree		0 Agree (1 and 2)
vaccination and vaccine-	2 I somewhat agree		1 Disagree (3 and 4)
related issues responsibly	3 I somewhat disagree		
	4 I completely disagree		
	5 I can't say		
What is your gender?	1 Women		1 Women
	2 Men		2 Men
	3 Other		
our year of birth?			1 18-39
			2 40-59
			3 60-79
What is your marital status?	1 Married, cohabitation or		1 In relationship (1)
	registered partnership		2 Relationship-free (2 and 3)
	2 Unmarried		
	3 Divorced or separated		
	3 Widow		
What do you do full time?	1 I work full time		1 Retired (5)
	2 I work part time		2 Working (1, 2 and 3)
	3 I'm partly at work, partly retired		3 Unemployed (4)
	4 I'm unemployed or laid off		4 Student or other activity (6, 7, 8 and 9)
	5 I'm retired		

earch for health information?	2 Yes	
you use the internet to	1 No	
	9 I don't want to answer	
	8 I can't say	
	7 Over 8000 €	
	6 5001–8000 €	
	5 4001-5000 €	
embers of your household?	4 3001–4000 €	4 Don't want to say or don't know
come and benefits) of the	3 2001–3000 €	3 More than 5000 €
onthly income (after-tax	2 1001–2000 €	2 2001-5000 €
hat is the total disposable	1 At the most 1000 €	1 Up to 2000 €
	4 Rural areas	
	agglomeration	
	3 Municipal center, church village or	
	2 Some other city center or suburb	
	Espoo, Vantaa, Kauniainen)	3 Rural (4)
sidential area?	Helsinki Metropolitan Area (Helsinki,	2 Suburban (3)
nat is your current	1 The center or suburb of the	1 Urban (1 and 2)
alth care?	2 Yes	
you have any education in	1 No	
	6 Other	
	higher education	
	5 University or other institute for	
	4 University of applied sciences	
	3 Vocational school	3 Tertiary education (4 and 5)
ucation?	2 Upper secondary school	2 Upper secondary education (2 and 3)
at is your highest level of	1 Primary school	1 First degree education (1 and 6)
	9 Something else	
	leave	
	8 I'm on long-term (>6 months) sick	
	7 I'm studying	
	parental or care leave	
	6 I'm on maternity, paternity,	

What is your current health	1 Good	1 Good or fairly good
status?	2 Fairly good	2 Moderate
	3 Moderate	3 Poor or fairly poor
	4 Fairly poor	
	5 Poor	
Do you have any disease that	1 No	
entitles you to special	2 Yes	
reimbursement for medicines		
provided by the Finnish Social		
Insurance Institute?		

Table S2 Univariate comparison: "Confidence in vaccines" and "Access to information on vaccines and VPDs"

	"Vaccination is a good way to protect		"Vaccine are safe"			"I have eno	ugh informatio	on about	"I have enough information about			
	against dise	ase"					VPDs"			vaccines"		
Characteristic	Agree	Dis –	ρ	Agree	Dis –	ρ	Agree	Dis -	ρ	Agree	Dis -	ρ
	n (%)	agree		n (%)	agree		n (%)	agree		n (%)	agree	
		n (%)			n (%)			n (%)			n (%)	
Age group												
60-79	821 (98)	15 (2)		784 (96)	31 (4)		707 (90)	74 (10)		640 (84)	123 (16)	
40-59	688 (96)	29 (4)	0.021*	632 (90)	71 (10)	<0.001***	595 (86)	96 (14)	<0.001***	552 (79)	143 (21)	<0.001***
18-39	482 (96)	19 (4)		445 (91)	45 (9)		395 (79)	102 (21)		368 (75)	123 (25)	
Gender												
Woman	1046 (98)	26 (2)	0.000	970 (93)	74 (7)	0.653	906 (88)	125 (12)	0.022*	817 (80)	203 (20)	0.869
Man	925 (96)	37 (4)	0.086	873 (92)	73 (8)	0.653	776 (84)	143 (16)	0.033*	726 (80)	185 (20)	0.005
Residential area												
Helsinki-Uusimaa	747 (97)	26 (3)		707 (94)	48 (6)		643 (86)	101 (14)		600 (82)	133 (18)	
South Finland	400 (97)	14 (3)	0.797	375 (92)	31 (8)	0.353	341 (87)	52 (13)	0.549	310 (79)	80 (21)	0.314
North and East Finland	367 (97)	11 (3)	0.797	347 (93)	24 (7)	0.253	322 (87)	46 (13)	0.549	293 (80)	72 (20)	0.314
West Finland	477 (97)	12 (3)		432 (91)	44 (9)		391 (84)	73 (16)		357 (77)	104 (23)	
Marital status												
In relationship	1256 (97)	32 (3)	0.064	1184 (94)	81 (6)	0.040*	1098 (89)	140 (11)	<0.001***	1008 (82)	222 (18)	0.007**
Relationship-free	735 (96)	31 (4)	0.064	677 (91)	66 (9)	0.049*	599 (82)	132 (18)	<0.001****	522 (77)	167 (23)	0.007**
Highest education												
Tertiary education	1015 (98)	21 (2)	0.003**		48 (5)	40.004***	893 (89)	112 (11)	0.003**	837 (84)	160 (16)	40 004 ***
Upper secondary education	837 (95)	40 (5)	0.003**	765 (90)	88 (10)	<0.001***	699 (83)	138 (17)	0.002**	627 (76)	196 (24)	<0.001*** )

First degree education	139 (99)	2 (1)		124 (92)	11 (8)		105 (83)	22 (17)		96 (74)	33 (26)	
Household net income per												
month												
More than 5000 €	279 (97)	9 (3)		272 (96)	11 (4)		249 (89)	32 (11)		238 (84)	44 (16)	
2001-5000 €	1045 (98)	23 (2)		985 (94)	64 (6)		905 (88)	118 (12)		837 (82)	183 (18)	
Up to 2000 €	395 (96)	17 (4)	0.051	361 (90)	41 (10)	<0.001***	317 (80)	79 (20)	<0.001***	281 (73)	105 (27)	<0.001***
Don't want to say or don't	272 (25)	4.4 (5)		2.42.(22)	24 (44)		225 (24)	12 (16)		224 (72)	57 (22)	
know	272 (95)	14 (5)		243 (89)	31 (11)		226 (84)	43 (16)		204 (78)	57 (22)	
Health status												
Good or fairly good health	1353 (97)	35 (3)		1280 (94)	83 (6)		1177 (88)	159 (12)		1103 (83)	224 (17)	
Moderate health	527 (96)	20 (4)	0.025*	477 (90)	51 (10)	0.008**	430 (82)	91 (18)	0.001**	377 (74)	134 (26)	<0.001***
Poor or fairly poor health	111 (93)	8 (7)		104 (89)	13 (11)		90 (80)	22 (20)		80 (72)	31 (28)	
Principal activity												
Retired	695 (98)	16 (2)		664 (95)	33 (5)		595 (89)	74 (11)		537 (82)	115 (18)	
Working	920 (97)	29 (3)	0.100	851 (92)	76 (8)	0.000**	796 (87)	117 (13)	<0.001***	737 (80)	180 (20)	0.010*
Student or other	266 (96)	12 (4)	0.188	248 (91)	25 (9)	0.006**	220 (80)	54 (20)	<0.001****	210 (78)	60 (22)	0.010*
Unemployment	110 (95)	6 (5)		98 (88)	13 (12)		85 (76)	27 (24)		76 (69)	34 (31)	
Urbanization level												
Urban	1540 (97)	43 (3)		1449 (93)	100 (7)		1308 (86)	210 (14)		1211 (81)	286 (19)	
Suburban	214 (96)	8 (4)	0.179	197 (91)	19 (9)	0.013*	189 (87)	28 (13)	0.881	173 (80)	42 (20)	0.059
Rural	237 (95)	12 (5)		215 (88)	28 (12)		200 (85)	34 (15)		176 (74)	61 (26)	
Education in health care												
No	1732 (97)	57 (3)	0.534	1616 (92)	133 (8)	0.254	1455 (85)	253 (15)	0.004**	1340 (79)	352 (21)	0.021*
Yes	259 (98)	6 (2)	0.534	245 (95)	14 (5)	0.254	242 (93)	19 (7)	0.001**	220 (86)	37 (14)	0.021*

Using internet to find health												
information												
No	271 (95)	13 (5)	0.160	249 (92)	22 (8)	0.677	218 (83)	44 (17)	0.160	203 (77)	59 (23)	0.302
Yes	1720 (97)	50 (3)	0.100	1612 (93)	125 (7)	0.077	1479 (87)	228 (13)	0.100	1357 (80)	330 (20)	0.302
Social Insurance Institution's												
special reimbursement for												
medicines												
No	1365 (97)	43 (3)	1.000	1279 (93)	101 (7)	1.000	1159 (86)	190 (14)	0.658	1078 (80)	267 (20)	0.908
Yes	626 (97)	20 (3)	1.000	582 (93)	46 (7)	1.000	538 (87)	82 (13)	0.036	482 (80)	122 (20)	0.500

 $<sup>*** \</sup>rho < 0.001 ** \rho < 0.01 * \rho < 0.05$ 

Table S3 Univariate comparison: "Debate on vaccination issues"

	"Everyone	"Everyone should get vaccinated		"Vaccinatio	"Vaccination does not contradict with			"Anti-vaccination is a big problem in			"The media deals with vaccination and		
	according t	according to the national vaccination			my way of thinking"			Finland"			vaccine-related issues responsibly"		
	schedule"												
Characteristic	Agree	Dis -	ρ	Agree	Dis –	ρ	Agree	Dis –	ρ	Agree	Dis –	ρ	
	n (%)	agree		n (%)	agree		n (%)	agree		n (%)	agree		
		n (%)			n (%)			n (%)			n (%)		
Age group													
60-79	818 (98)	19 (2)		786 (96)	34 (4)		656 (84)	126 (16)		584 (77)	174 (23)		
40-59	657 (93)	49 (7)	<0.001***	656 (93)	51 (7)	0.021*	447 (68)	213 (32)	<0.001***	419 (67)	202 (33)	<0.001***	
18-39	459 (92)	38 (8)		454 (93)	34 (7)		298 (62)	186 (38)		283 (63)	165 (37)		
Gender													

Woman	1026 (96)	40 (4)	0.004**	989 (94)	65 (6)	0.677	719 (74)	258 (26)	0.500	671 (73)	251 (27)	0.044*
Man	890 (93)	64 (7)	0.004**	889 (94)	53 (6)	0.677	670 (72)	259 (28)	0.502	607 (68)	281 (32)	0.044*
Residential area												
Helsinki-Uusimaa	735 (96)	29 (4)		714 (95)	40 (5)		532 (73)	200 (27)		513 (74)	177 (26)	
South Finland	380 (93)	29 (7)	0.007	384 (94)	26 (6)	0.702	281 (74)	100 (26)	0.042	241 (67)	121 (33)	0.027*
North and East Finland	358 (95)	19 (5)	0.087	349 (93)	25 (7)	0.792	256 (73)	95 (27)	0.943	231 (67)	111 (33)	0.027*
West Finland	461 (94)	29 (6)		449 (94)	28 (6)		332 (72)	130 (28)		301 (69)	132 (31)	
Marital status												
In relationship	1227 (96)	56 (4)	0.025*	1194 (94)	69 (6)	0.220	886 (74)	310 (26)	0.402	819 (70)	345 (30)	1.000
Relationship-free	707 (93)	50 (7)	0.036*	702 (93)	50 (7)	0.320	515 (70)	215 (30)	0.102	467 (70)	196 (30)	1.000
Highest education												
Tertiary education	991 (96)	41 (4)		977 (95)	49 (5)		706 (72)	268 (28)		685 (74)	243 (26)	
Upper secondary education	810 (93)	60 (7)	0.012*	796 (93)	59 (7)	0.076	592 (72)	231 (28)	0.166	523 (67)	256 (33)	0.004**
First degree education	133 (96)	5 (4)		123 (92)	11 (8)		103 (80)	26 (20)		78 (65)	42 (35)	
Household net income per												
month												
More than 5000 €	277 (97)	9 (3)		276 (96)	12 (4)		203 (74)	72 (26)		195 (74)	68 (26)	
2001-5000 €	1016 (96)	47 (4)		995 (94)	59 (6)		740 (74)	263 (26)		677 (70)	284 (30)	
Up to 2000 €	376 (93)	29 (7)	0.023*	372 (93)	26 (7)	0.241	279 (72)	109 (28)	0.419	259 (71)	104 (29)	0.121
Don't want to say or don't	265 (02)	24 (7)		252 (02)	22 (0)		170 (60)	01 (21)		455 (C5)	05 (25)	
know	265 (93)	21 (7)		253 (92)	22 (8)		179 (69)	81 (31)		155 (65)	85 (35)	
Health status												
Good or fairly good health	1322 (96)	59 (4)	0.007**	1290 (94)	77 (6)	0.406	924 (70)	387 (30)	0.005**	909 (73)	342 (27)	0.007**
Moderate health	505 (93)	35 (7)	0.007**	501 (94)	32 (6)	0.406	389 (78)	112 (22)	0.005**	313 (66)	164 (34)	0.007**

Poor or fairly poor health	107 (90)	12 (10)		105 (91)	10 (9)		88 (77)	26 (23)		64 (65)	35 (35)	
Principal activity												
Retired	697 (98)	17 (2)		661 (94)	39 (6)		561 (85)	96 (15)		500 (78)	142 (22)	
Working	890 (95)	48 (5)	<0.001***	879 (94)	51 (6)	0.277	601 (67)	289 (33)	<0.001***	559 (67)	279 (33)	<0.001***
Student or other	248 (90)	27 (10)	<0.001***	256 (93)	18 (7)	0.277	169 (63)	101 (37)	<0.001****	164 (66)	85 (34)	<0.001****
Unemployment	99 (88)	14 (12)		100 (90)	11 (10)		70 (64)	39 (36)		63 (64)	35 (36)	
Urbanization level												
Urban	1494 (95)	76 (5)		1467 (95)	82 (5)		1082 (73)	403 (27)		1014 (72)	395 (28)	
Suburban	210 (95)	12 (5)	0.278	207 (94)	14 (6)	0.040*	153 (71)	61 (29)	0.907	135 (67)	65 (33)	0.015**
Rural	230 (93)	18 (7)		222 (91)	23 (9)		166 (73)	61 (27)		137 (63)	81 (37)	
Education in health care												
No	1678 (94)	99 (6)	0.067	1653 (94)	104 (6)	1.000	1210 (72)	467 (28)	0.153	1120 (70)	470 (30)	0.961
Yes	256 (97)	7 (3)	0.067	243 (94)	15 (6)	1.000	191 (77)	58 (23)	0.153	166 (70)	71 (30)	0.961
Using internet to find health												
information												
No	264 (93)	19 (7)	0.273	256 (92)	23 (8)	0.000	192 (74)	69 (26)	0.000	177 (70)	75 (30)	1 000
Yes	1670 (95)	87 (5)	0.273	1640 (94)	96 (6)	0.099	1209 (73)	456 (27)	0.806	1109 (70)	466 (30)	1.000
Social Insurance Institution's												
special reimbursement for				786 (96)	34 (4)	0.021*						
medicines												
No	1315 (94)	79 (6)	0.193	656 (93)	51 (7)	0.658	912 (69)	404 (31)	<0.001***	869 (70)	379 (30)	0.324
Yes	619 (96)	27 (4)	0.193	454 (93)	34 (7)	0.058	489 (80)	121 (20)	<0.001****	417 (72)	162 (28)	0.324
	0.05											

 $<sup>*** \</sup>rho < 0.001 ** \rho < 0.01 * \rho < 0.05$ 

Table S4 Single variable analysis adjusted for age, gender and region: "Confidence in vaccines" and "Access to information on vaccines and VPDs"

	"Vaccination is a go	ood way to protect	"Vaccine are safe"		"I have enough inf	ormation about	"I have enough information about		
	against disease"				VPDs"		vaccines"		
Characteristic	OR [CI]	ρ	OR [CI]	ρ	OR [CI]	ρ	OR [CI]	ρ	
Marital status									
In relationship	Reference		Reference		Reference		Reference		
Relationship-free	1.6 [0.9-2.6]	0.088	1.4 [1.0-1.9]	0.095	1.6 [1.2-2.0]	0.001**	1.3 [1.0-1.7]	0.021*	
Highest education									
Tertiary education	Reference		Reference		Reference		Reference		
Upper secondary education	2.4 [1.4-4.1]	0.003**	2.4 [1.7-3.5]	<0.001***	1.2 [0.7-2.0]	<0.001***	1.6 [1.3-2.1]	<0.001***	
First degree education	0.8 [0.1-2.8]	0.003	2.1 [1.0-4.1]	<0.001	2.0 [1.2-3.2]	<0.001	2.0 [1.3-3.0]	<0.001	
Household net income per month									
More than 5000 €	Reference		Reference		Reference		Reference		
2001-5000 €	0.8 [0.4-1.9]		1.8 [1.0-3.7]		1.8 [1.3-2.5]		1.2 [0.8-1.7]		
Up to 2000 €	1.5 [0.7-3.7]	0.070	2.9 [1.5-6.2]	<0.001***	1.9 [1.2-3.0]	0.001**	2.0 [1.3-3.0]	<0.001***	
Don't want to say or don't know	1.9 [0.8-4.7]		3.6 [1.8-7.6]		1.2 [0.8-1.8]		1.6 [1.0-2.4]		
Health status									
Good or fairly good health	Reference		Reference		Reference		Reference		
Moderate health	1.7 [0.9-3.0]	0.025*	1.9 [1.3-2.7]	0.002**	1.0 [0.6-1.7]	<0.001***	1.9 [1.5-2.5]	<0.001***	
Poor or fairly poor health	2.9 [1.2-6.1]	0.025	2.0 [1.0-3.6]	0.002	1.8 [1.1-3.0]	<0.001	2.0 [1.3-3.1]	<0.001	
Principal activity									
Retired	Reference		Reference		Reference		Reference		

Working	0.6 [0.2-1.4]		0.7 [0.4-1.3]		1.4 [0.8-2.4]		0.7 [0.5-1.1]	
Student or other	1.1 [0.4-2.9]	0.250	0.9 [0.4-1.9]	0.421	2.2 [1.3-3.5]	0.003**	0.8 [0.5-1.3]	0.048*
Unemployment	1.1 [0.3-3.4]		1.1 [0.5-2.4]		1.2 [0.7-2.3]		1.3 [0.7-2.2]	
Urbanization level								
Urban	Reference		Reference		Reference		Reference	
Suburban	1.4 [0.6-3.0]	0.113	1.3 [0.8-2.2]	0.027*	1.2 [0.7-2.2]	0.729	1.0 [0.7-1.4]	0.059
Rural	2.2 [1.0-4.3]	0.113	1.9 [1.2-3.1]	0.027	1.2 [0.8-1.7]	0.729	1.5 [1.1-2.1]	0.059
Education in health care								
No	Reference		Reference		Reference		Reference	
Yes	0.7 [0.3-1.6]	0.489	0.6 [0.3-1.1]	0.089	2.4 [1.5-4.2]	<0.001***	0.6 [0.4-0.9]	0.004**
Using internet to find health								
information								
No	Reference		Reference		Reference		Reference	
Yes	0.6 [0.3-1.1]	0.091	0.7 [0.5-1.2]	0.224	1.5 [1.0-2.2]	0.046*	0.8 [0.6-1.1]	0.110
Social Insurance Institution's special								
reimbursement for medicines								
No	Reference		Reference		Reference		Reference	
Yes	1.2 [0.7-2.1]	0.523	1.2 [0.8-1.8]	0.303	0.9 [0.7-1.2]	0.577	1.2 [0.9-1.5]	0.253

 $<sup>*** \</sup>rho < 0.001 ** \rho < 0.01 * \rho < 0.05$ 

Table S5 Single variable analysis adjusted for age, gender and region: "Debate on vaccination issues"

	"Everyone should get vaccinated according to the national vaccination		"Vaccination does not contradict with my way of thinking"		"Anti-vaccination is a big problem in Finland"		"The media deals with vaccination and vaccine-related issues responsibly"	
	schedule"							
Characteristic	OR [CI]	ρ	OR [CI]	ρ	OR [CI]	ρ	OR [CI]	ρ
Marital status								
In relationship	Reference		Reference		Reference		Reference	
Relationship-free	1.4 [0.9-2.1]	0.104	1.2 [0.8-1.7]	0.432	1.1 [0.9-1.3]	0.534	1.0 [0.8-1.2]	0.646
Highest education								
Tertiary education	Reference		Reference		Reference		Reference	
Upper secondary education	1.8 [1.2-2.7]	0.021*	1.5 [1.0-2.2]	0.040*	1.1 [0.9-1.3]	0.645	1.4 [1.2-1.8]	40.004***
First degree education	1.2 [0.4-2.8]	0.021*	2.0 [1.0-3.9]	0.049*	0.8 [0.5-1.3]	0.615	1.8 [1.2-2.7]	<0.001***
Household net income per month								
More than 5000 €	Reference		Reference		Reference		Reference	
2001-5000 €	1.6 [0.8-3.6]		1.4 [0.8-2.9]		1.1 [0.8-1.5]		1.3 [0.9-1.7]	
Up to 2000 €	2.3 [1.1-5.4]	0.020*	1.6 [0.8-3.5]	0.214	1.0 [0.7-1.4]	0.339	1.1 [0.8-1.6]	0.038*
Don't want to say or don't know	3.0 [1.4-7.1]		2.1 [1.0-4.5]		1.4 [0.9-2.0]		1.7 [1.2-2.5]	
Health status								
Good or fairly good health	Reference		Reference		Reference		Reference	
Moderate health	1.8 [1.1-2.8]	0.000**	1.2 [0.7-1.8]	0.503	0.8 [0.6-1.0]	0.070	1.5 [1.2-1.9]	0.002**
Poor or fairly poor health	2.4 [1.1-4.5]	0.008**	1.5 [0.7-3.0]	0.502	0.7 [0.4-1.2]	0.079	1.5 [0.9-2.3]	0.002**
Principal activity								
Retired	Reference		Reference		Reference		Reference	
Working	1.0 [0.5-2.2]	0.004***	0.4 [0.2-0.7]	0.040*	1.8 [1.2-2.5]	0.000**	1.4 [1.0-2.0]	0.054
Student or other	2.6 [1.1-6.0]	<0.001***	0.5 [0.2-1.1]	0.019*	2.3 [1.5-3.4]	0.002**	1.5 [1.0-2.2]	0.254

	2.0.[4.4.6.0]		0.7[0.3.4.5]		24[4225]		1 [ [ 0 0 2 [ ]	
Unemployment	2.8 [1.1-6.8]		0.7 [0.3-1.5]		2.1 [1.3-3.5]		1.5 [0.9-2.5]	
Urbanization level								
Urban	Reference		Reference		Reference		Reference	
Suburban	1.0 [0.5-1.9]	0.502	1.2 [0.6-2.0]	0.133	1.1 [0.8-1.5]	0.877	1.2 [0.8-1.6]	0.039*
Rural	1.4 [0.8-2.5]		1.7 [1.0-2.9]		1.1 [0.8-1.5]		1.5 [1.1-2.1]	
Education in health care								
No	Reference		Reference		Reference		Reference	
Yes	0.4 [0.2-0.8]	0.013*	0.8 [0.4-1.4]	0.502	0.7 [0.5-1.0]	0.045*	1.0 [0.7-1.3]	0.867
Using internet to find health								
information								
No	Reference		Reference		Reference		Reference	
Yes	0.6 [0.4-1.1]	0.112	0.5 [0.3-0.9]	0.018*	0.8 [0.6-1.2]	0.256	0.9 [0.7-1.2]	0.473
Social Insurance Institution's special								
reimbursement for medicines								
No	Reference		Reference		Reference		Reference	
Yes	0.8 [0.5-1.3]	0.370	1.1 [0.7-1.7]	0.657	0.7 [0.6-0.9]	0.004**	1.0 [0.8-1.3]	0.932

 $<sup>*** \</sup>rho < 0.001 ** \rho < 0.01 * \rho < 0.05$