

**Supplementary Table S1: Recategorization of items from the Gijón Scale**

Scale item	Recategorization	Included categories
Low level of income (choose only one answer, the most suitable)	Yes	From 707 to 1060 euros per month. From 443 to 706 euros per month. I receive a non-contributory pension, for disability or social assistance. Less than the previous sections or I have no income)
	No	More than 1060 euros per month
Living alone	Yes	I live alone and I am independent. I live alone with close family and have some degree of dependency. I live alone and isolated and have some degree of dependency.
	No	I live accompanied with or without dependence
Absence of social relationships (choose only one answer, the most suitable)	Yes	I don't leave the house or receive visitors (or less than once a week)
	No	I maintain social relationships outside the home with many people. I interact with family and neighbors/friends and leave the house. I only interact with family and leave the house. I don't leave the house, but I receive visitors (at least once a week)
Absence of social support What type of social support do you have? (choose only one answer, the most suitable)	Yes	I need permanent care that is not given.
	No	I don't need any support. I receive support from family and/or neighbors/friends. I receive formal or voluntary home help. I receive help in a residence.
Inadequate housing (choose only one answer, the most suitable)	Yes	Has architectural barriers inside or at the entrance of the house. It has humidity (or similar problems) or is not adequately equipped (incomplete bathroom, absence of hot water, heating, ...) Absence of elevator (if living in an apartment) or telephone. It is inadequate: a shanty, declared in ruins, lack of minimal equipment, overcrowded, ...
	No	It is suitable for my needs.

Source: (Cabrera González et al., 1999)

Supplementary Table S2. Global bivariate for change in SPH

		GLOBAL		WORSENING n=62 (18.7%)		NO IMPROVEMENT n=65 (19.6%)		REMAINED WELL n=129 (38.9%)		IMPROVEMENT n=76 (22.9%)		P-VALUE
VARIABLES		Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)		
<b>AGE (n=330)</b>		60.5 (15.1)		62.2 (14.7)		66 (13.5)		59.7 (15.1)		55.8 (15.2)		0.756
<b>SOCIAL RISK (Continuous variable*) (n=283)</b>		8.70 (2.6)		8.0(2.6)		9.9 (2.8)		8.1 (2.2)		9.4 (2.5)		0.140
Variable	Categories (base code in front)	n	%	n	%	n	%	n	%	n	%	
<b>Participant type (n=326)</b>	<b>Chronic</b>	227	69.6	40	17.6	52	22.9	75	33.0	60	26.4	0.001
	<b>Caregiver</b>	71	21.8	15	21.1	5	7.0	41	57.8	10	14.1	
	<b>Both</b>	28	8.59	3	10.7	8	28.6	13	46.4	4	14.3	
<b>Sex (n=331)</b>	<b>Man</b>	108	32.6	19	17.6	16	14.8	39	36.1	3	4	0.065
	<b>Women</b>	223	67.4	43	19.3	48	21.5	90	40.4	42	18.8	
<b>MIGRATION STATUS (Country of birth) (n=329)</b>	<b>Yes (Other country)</b>	3	10.3	9	26.5	5	14.7	12	39.7	8	23.5	0.62
	<b>No (Spain)</b>	295	89.7	53	18.0	59	20	117	35.3	66	22.4	
<b>EDUCATIONAL LEVEL (three categories) (n=323)</b>	<b>Primary or less</b>	161	49.9	23	14.3	42	26.1	62	38.5	3	4	0.008
	<b>Secondary</b>	121	37.5	23	19.0	16	13.2	47	38.8	35	28.9	
	<b>University students</b>	41	12.7	13	31.7	6	14.6	18	43.9	4	9.8	
<b>RESIDENCE INSTITUTION (n=332)</b>	<b>None</b>	261	78.6	49	18.8	53	20.3	110	42.2	49	18.8	0.004
	<b>Nursing home</b>	7	2.1	3	42.9	3	42.9	0	0	1	14.3	
	<b>Prison facility</b>	47	1.95	8	17.0	6	12.8	16	34.0	17	36.2	
	<b>Alcohol withdrawal center</b>	17	5.1	2	11.8	3	17.7	3	17.7	9	52.9	
<b>RESIDENCE AREA (n=325)</b>	<b>Rural Peasant</b>	75	23.1	17	22.7	11	14.7	30	40	17	22.7	0.148
	<b>Rural Intensive</b>	131	40.3	16	12.2	33	25.2	51	38.9	31	23.7	
	<b>Peri urban Peasant</b>	41	12.6	13	31.7	10	24.4	12	29.3	6	14.6	
	<b>Intensive Peri urban</b>	42	12.9	7	16.7	5	11.9	20	47.6	10	23.8	
	<b>Urban</b>	36	2.6	8	22.2	6	16.7	11	30.6	11	30.6	
<b>SOCIAL RISK GLOBAL ASSESSMENT (Gijón Questionnaire) (n=283)</b>	<b>Risk free</b>	188	66.4	42	22.3	24	12.8	87	46.3	35	18.6	0.000
	<b>With socio-familial risk</b>	88	31.1	9	10.2	26	29.6	26	29.6	27	30.7	
	<b>Socio-familial problems</b>	7	2.5	2	28.6	3	42.9	0	0	2	28.6	
<b>SOCIAL RISK GLOBAL ASSESSMENT (Gijón Questionnaire) (n=283)</b>	<b>Risk free</b>	188	66.4	42	22.3	24	12.8	87	46.3	35	18.6	0.000
	<b>At risk/with socio-familial problems</b>	95	33.6	11	11.6	29	30.5	26	27.4	29	30.5	
<b>VARIABLES OF THE GIJÓN QUESTIONNAIRE DICHOTOMIZED</b>		n	%	n	%	n	%	n	%	n	%	
<b>LOW LEVEL OF INCOME (n=307)</b>	<b>Yes</b>	205	66.8	27	13.2	46	22.4	76	37.1	56	27.3	0.001
	<b>No</b>	102	33.2	28	27.5	16	15.7	45	44.1	13	12.8	
<b>LIVE ALONE (n=324)</b>	<b>Yes</b>	84	25.9	16	19.1	21	25.0	26	31.0	21	25	0.217
	<b>No</b>	240	74.1	45	18.8	41	17.1	102	42.5	52	21.7	
<b>ABSENCE OF SOCIAL RELATIONSHIPS (n=326)</b>	<b>Yes</b>	6	1.8	1	16.7	2	33.3	2	33.3	1	16.7	0.854
	<b>No</b>	320	98.2	61	19.1	61	19.1	126	39.4	72	22.5	
<b>ABSENCE OF SOCIAL SUPPORT (n=312)</b>	<b>Yes</b>	2	0.6	0	0.0	1	50.0	0	0.0	1	50.0	0.419
	<b>No</b>	310	99.4	60	19.4	58	18.7	121	39.0	71	22.9	
<b>INADEQUATE HOUSING (n=327)</b>	<b>Yes</b>	61	18.7	7	11.5	19	31.2	19	31.2	16	26.2	0.025
	<b>No</b>	266	81.4	54	20.3	44	16.5	110	41.4	58	21.8	

\* Gijón Scale: minimum score =5 and maximum =25 points. Sections: <10 indicates no socio-familial risk, 10 to 14 in risk, >15 problems

Supplementary Table S3. Bivariate analysis for change in SPH in men

		GLOBAL		WORSENING (n=19; 17.6%)		NO IMPROVEMENT (n=16; 14.8%)		REMAINED WELL (n=39; 36.1%)		IMPROVEMENT (n= 34; 31.5%)		P-VALUE
VARIABLES		Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)		
<b>AGE (n=107)</b>		55.7 (16.8)		63.3(16.0)		62.1(16.5)		54.3(17.9)		50.0(13.7)		0.504
<b>SOCIAL RISK (Continuous *) (n=92)</b>		9.2 (3.2)		8.4 (3.7)		10.5(4.0)		8.5 (2.7)		9.8 (2.8)		0.227
<b>Variable</b>	<b>Categories (base code in front)</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	
<b>Participant type (n=106)</b>	<b>Chronic</b>	16	15.1	14	16.9	13	14.9	30	34.5	30	34.5	0.102
	<b>Caregiver</b>	87	82.1	3	18.8	1	6.25	9	56.3	3	18.8	
	<b>Both</b>	3	2.8	0	0.0	2	66.7	0	0.0	1	33.3	
<b>MIGRATION STATUS (Country of birth) (n=106)</b>	<b>Yes (Other country)</b>	13	12.3	5	38.5	0	0.0	4	30.8	4	30.8	0.118
	<b>No (Spain)</b>	93	87.7	14	15.1	16	17.2	35	37.6	28	30.1	
<b>EDUCATIONAL LEVEL (n=105)</b>	<b>Primary or less</b>	45	42.9	6	13.3	8	17.8	22	48.9	9	20	0.041
	<b>Secondary</b>	47	44.8	8	17.0	5	10.6	14	29.8	20	42.6	
	<b>University students</b>	13	12.4	5	38.5	3	23.1	2	15.4	3	23.1	
<b>RESIDENCE INSTITUTION (n=108)</b>	<b>None</b>	51	47.2	11	21.6	8	15.7	21	41.2	11	21.6	0.189
	<b>Nursing home</b>	4	3.7	1	25.0	2	50	0	0	1	25.0	
	<b>Prison facility</b>	42	38.9	6	14.3	4	9.5	16	38.1	16	38.1	
	<b>Alcohol withdrawal center</b>	11	7.5	1	9.1	2	18.2	2	18.2	6	54.6	
<b>RESIDENCE AREA (n=107)</b>	<b>Rural Peasant</b>	21	19.6	5	23.8	2	9.5	7	33.3	7	33.3	0.600
	<b>Rural Intensive</b>	87	81.3	9	15.8	8	14.0	22	38.6	18	32.6	
	<b>Peri urban Peasant</b>	8	7.5	1	12.5	3	37.5	3	37.5	1	12.5	
	<b>Intensive Peri urban</b>	8	7.5	2	25	1	12.5	4	50.0	1	12.5	
	<b>Urban</b>	13	12.1	2	15.4	2	15.4	2	15.4	7	54.9	
<b>SOCIAL RISK GLOBAL ASSESSMENT (Gijón Questionnaire) (n=283)</b>	<b>Risk free</b>	52	56.5	12	23.1	7	13.5	21	40.4	12	23.1	0.086
	<b>At risk/with socio-familial problems</b>	40	43.5	4	10	8	20	11	27.5	17	42.5	
<b>VARIABLES OF THE GIJÓN QUESTIONNAIRE DICHOTOMIZED</b>		<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	
<b>LOW LEVEL OF INCOME (n=102)</b>	<b>Yes</b>	63	61.8	6	9.5	9	14.3	22	34.9	26	41.3	0.040
	<b>No</b>	39	38.2	10	25.6	7	18.0	15	38.5	7	18.0	
<b>LIVE ALONE (n=105)</b>	<b>Yes</b>	32	30.5	6	18.8	10	31.3	6	18.8	10	31.3	0.009
	<b>No</b>	73	69.5	13	17.8	6	8.2	32	43.8	22	30.1	
<b>ABSENCE OF SOCIAL RELATIONSHIPS (n=104)</b>	<b>Yes</b>	6	5.8	1	16.7	2	33.3	2	33.3	1	16.7	0.630
	<b>No</b>	98	94.2	18	18.4	14	14.3	36	36.7	30	30.6	
<b>ABSENCE OF SOCIAL SUPPORT (n=99)</b>	<b>Yes</b>	2	2.0	0	0.0	1	50.0	0	0.0	1	50.0	0.398
	<b>No</b>	97	98.0	19	19.6	14	14.4	3.4	35.1	30	30.9	
<b>INADEQUATE HOUSING (n=106)</b>	<b>Yes</b>	19	17.9	3	15.8	3	15.8	8	42.1	5	26.3	0.949
	<b>No</b>	87	82.1	16	18.4	13	14.9	31	35.6	27	31.0	

\* Gijón  
Scale:

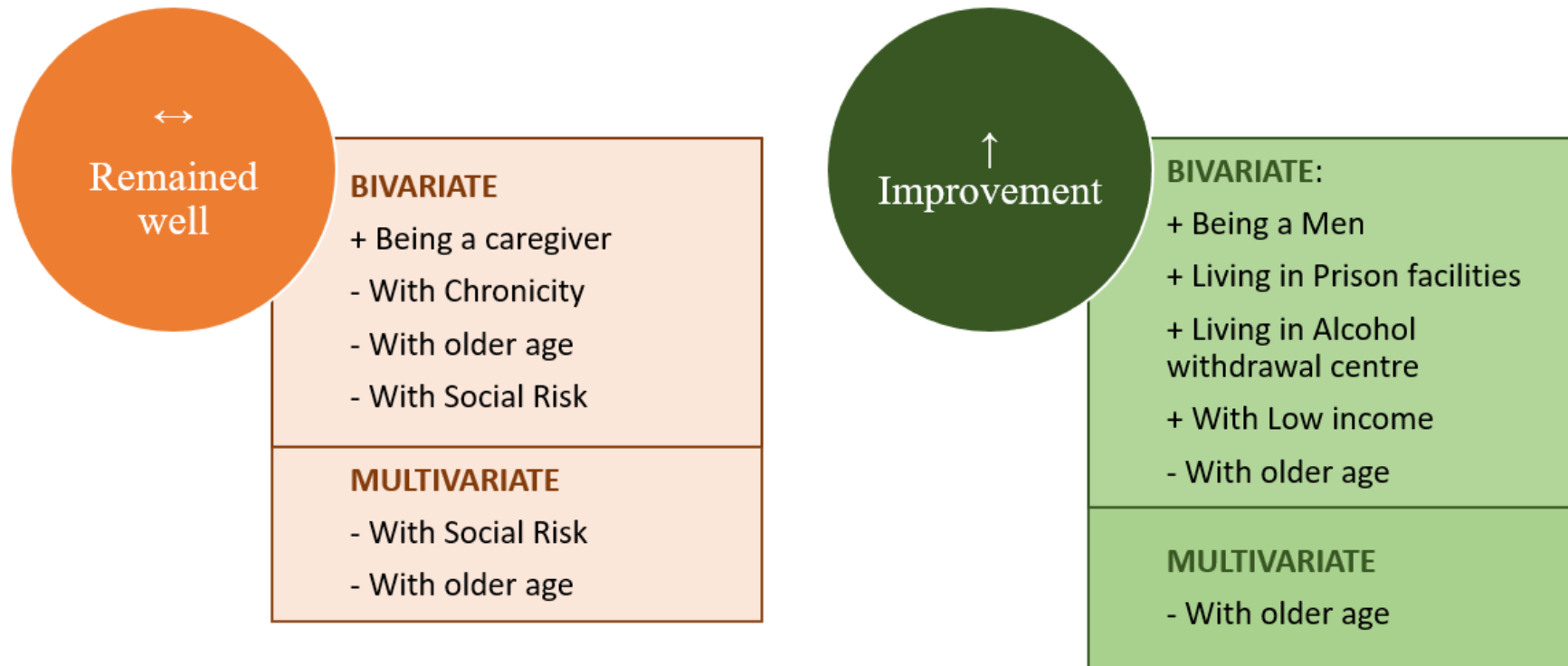
minimum score =5 and maximum =25 points. Sections: <10 indicates no socio-familial risk, 10 to 14 in risk, >15 problems

Supplementary Table S4. Bivariate for change in SPH in women

		GLOBAL		WORSENING (n= 43; 19.3%)		NO IMPROVEMENT (n= 48; 21.5%)		REMAINED WELL (n= 90; 40.4%)		IMPROVEMENT (n= 42; 18.8%)		P-VALUE
VARIABLES		Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)		Mean (SD)		
AGE (n=222)		62.8 (13.7)		61.7 (14.2)		67.5 (12.3)		62.0 (13.1)		60.4 (14.8)		0.598
SOCIAL RISK (Continuous*) (n=191)		8.4 (2.2)		171 (2.0)		9.7 (2.2)		7.9 (1.9)		8.9 (2.2)		0.677
Variable	Categories	n	%	n	%	n	%	n	%	n	%	
Participant type (n=219)	Chronic	139	63.5	26	18.7	38	27.3	45	32.4	30	21.6	0.007
	Caregiver	55	25.1	12	21.8	4	7.3	32	58.2	7	12.7	
	Both	25	11.4	3	12.0	6	24.0	13	52.0	3	12.0	
MIGRATION STATUS (Country of birth) (n=222)	Yes (Other country)	21	9.5	4	19.1	5	23.8	8	38.1	4	19.1	0.999
	No (Spain)	201	90.5	39	19.4	42	20.9	82	40.8	28	18.9	
EDUCATIONAL LEVEL (n=217)	Primary or less	115	53	17	14.8	33	28.7	40	34.8	25	21.7	0.017
	Secondary	74	34.1	15	20.3	11	14.9	33	44.6	15	20.3	
	University students	28	12.9	8	28.6	3	10.7	16	57.1	1	3.6	
RESIDENCE INSTITUTION (n=223)	None	209	93.7	38	18.2	44	21.1	89	42.6	38	18.2	0.127
	Nursing home	3	1.3	2	66.7	1	33.3	0	0	0	0	
	Prison facility	5	2.2	2	40	2	40	0	0	1	20	
	Alcohol withdrawal center	6	2.7	1	16.7	1	16.7	1	16.7	3	50	
RESIDENCE AREA (n=217)	Rural Peasant	54	24.8	12	22.2	9	16.7	23	42.6	10	18.5	0.056
	Rural Intensive	74	3.1	7	9.5	25	33.8	29	39.2	13	17.6	
	Peri urban Peasant	32	14.7	12	37.5	6	18.8	9	28.1	5	15.6	
	Intensive Peri urban	3.4	15.7	5	14.7	4	11.8	16	47.1	9	26.5	
	Urban	23	10.6	6	26.1	4	17.4	9	39.1	4	17.4	
SOCIAL RISK GLOBAL ASSESSMENT (Gijón Questionnaire*) (n=283)	Risk free	136	71.2	30	22.1	17	12.5	66	48.5	23	16.9	0.000
	At risk/with socio-familial problems	55	28.8	7	12.7	21	38.2	15	27.3	12	21.8	
VARIABLES OF THE GIJÓN QUESTIONNAIRE DICHOTOMIZED		n	%	n	%	n	%	n	%	n	%	
LOW LEVEL OF INCOME (n=204)	Yes	141	69.1	21	14.9	36	25.5	54	38.3	30	21.3	0.011
	No	63	30.9	18	28.6	9	14.3	30	47.6	6	9.5	
LIVE ALONE (n=219)	Yes	52	23.7	10	19.2	11	21.2	20	38.5	11	21.2	0.954
	No	167	76.3	32	19.2	35	21.0	70	41.9	30	18.0	
ABSENCE OF SOCIAL RELATIONSHIPS (n=221)	Yes	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	n. c.
	No	221	100	43	19.5	46	20.8	90	40.7	42	19	
ABSENCE OF SOCIAL SUPPORT (n=212)	Yes	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	n. c.
	No	212	100	41	19.3	43	20.3	87	41.0	41	19.3	
INADEQUATE HOUSING (n=220)	Yes	41	18.6	4	9.8	15	36.6	11	26.8	11	26.8	0.007
	No	179	81.4	38	21.2	31	17.3	79	44.1	31	17.3	

\* Gijón Scale: minimum score =5 and maximum =25 points. Sections: <10 indicates no socio-familial risk, 10 to 14 in risk, >15 problems.; n. c. = calculation is not possible due to lack of observations.

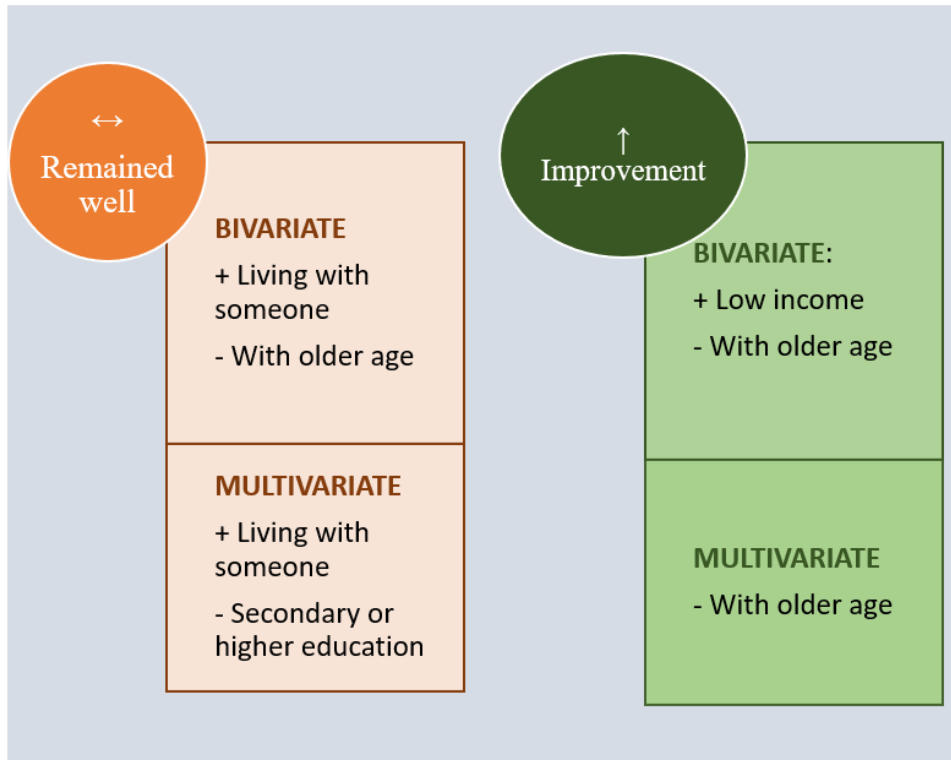
Figure S1. Summary multinomial regression change in self-perceived health: Global data.



+: increases the probability versus “worsening or no improvement”

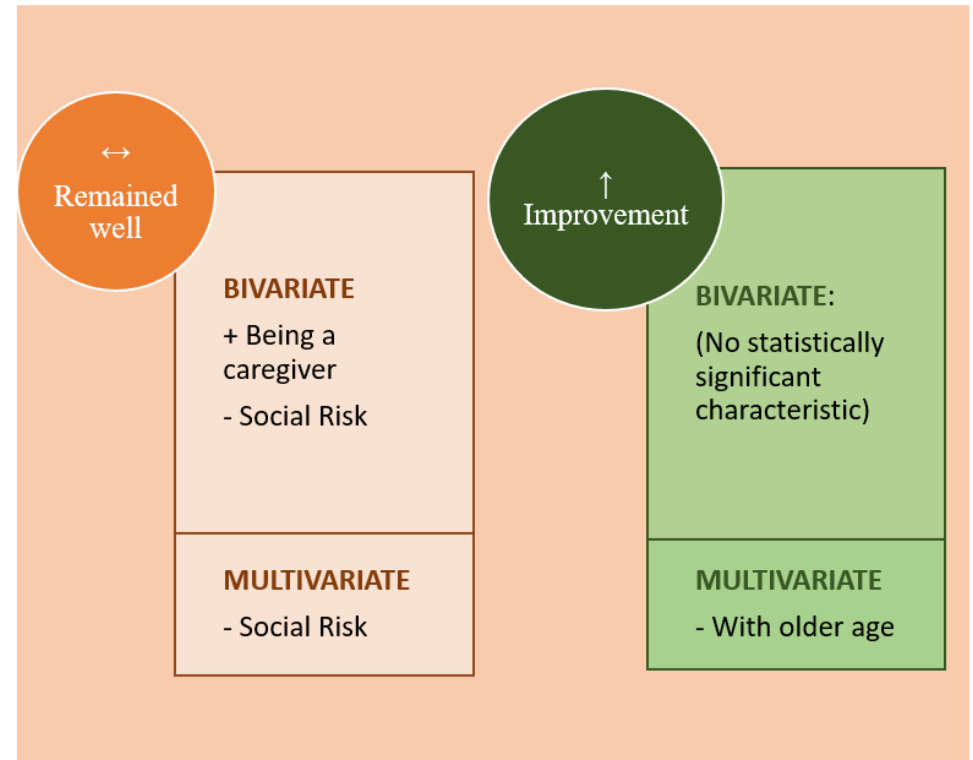
-: decreases the probability versus “worsening or no improvement”

Figure S2. Summary multinomial regression change in self-perceived health: Men.



+: increases the probability versus “worsening or no improvement”  
 -: decreases the probability versus “worsening or no improvement”

Figure S3. Summary multinomial regression change in self-perceived health: Women.



+: increases the probability versus “worsening or no improvement”  
 -: decreases the probability versus “worsening or no improvement”