

# Identifying the determinants of health insurance coverage among Peruvian women of reproductive age: an assessment based on the national Peruvian demographic survey of 2017

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## Research

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# Abstract

**Background:** Like many other Latin America- and Caribbean countries, Peru has introduced a tax-financed health insurance scheme called “Sistema Integral de Salud (SIS)” to foster progress towards Universal Health Coverage. The scheme explicitly targets the poorest sections of the population. Our study explores levels of health insurance coverage and their determinants among Peruvian women following the introduction of SIS. We wish to determine the extent to which the introduction of SIS has effectively closed gaps in insurance coverage and for whom.

**Methods:** Relying on the 2017 round of ENDES (Encuesta Nacional Demográfica y de Salud Familiar) survey, we analyzed data for 33168 women aged 15-49. We used multinomial logistic regression to explore the association between health insurance coverage (defined as No Insurance, SIS, Standard Insurance) and women’s socio-demographic and economic characteristics.

**Results:** Out of the 33168 women, 25.3% did not have any insurance coverage, 45.5% were covered by SIS and 29.2% were covered by a Standard Insurance scheme. Women in the SIS group were found to have lower educational levels, live in rural areas and more likely to be poorer. Women in the Standard insurance group were found to be more educated, more likely to be “Spanish”, and to be wealthier. Most uninsured women appeared to belong to a middle class, not poor enough to be eligible for SIS, but also not eligible for standard insurance.

**Conclusions:** Our study confirms that SIS has been effective in increasing coverage among vulnerable women, with coverage rates comparable with those observed among men. Nevertheless, on its own, it has proven to be insufficient to ensure universal coverage among women. Further reforms are needed to ensure that coverage is extended to all population groups.

## Background

One of the Sustainable Development Goals (SDG), specifically SDG3, adopted in 2015 by all United Nations Member States, is to “ensure healthy lives and promote well-being for all at all ages”. A specific target embedded in SDG3 is to achieve Universal Health Coverage (UHC) in all countries by 2030. The objective of UHC is to secure access to quality health services while ensuring financial risk protection in case of illness (1).

Over the last few decades, many countries in Latin America and the Caribbean (LAC) have been implementing health financing reforms aimed at fostering progress towards UHC. These reforms have largely aimed at increasing the number of people included in formal social health protection mechanisms (i.e. insurance schemes and tax-based health systems) and/or expanding the range of health services covered by existing schemes (2). A common pattern observed across several LAC countries has been the introduction of health insurance schemes specifically targeted to cover poor people and informal workers, alongside already existing social insurance schemes covering people employed in the formal sector (3). In most settings, unlike standard social health insurance schemes, schemes that specifically target the

poor are non-contributory and rely largely on public subsidies (2). This fragmentation in financing streams is often reflected in differential benefit packages and provider networks, leading to a system segmentation, which in turn gives rise to important inequalities in terms of access and quality of care (4).

Following other LAC countries such as Colombia and Mexico (5), Peru implemented in 2002 the “Seguro Integral de Salud/SIS” (=Integrated Health Insurance), a government-subsidized health insurance scheme aimed at providing coverage to uninsured citizens and specifically targeted at the most vulnerable sections of the population: those living in poverty and extreme poverty, as well as uncovered children and pregnant women (6). SIS is regulated by the Peruvian Ministry of Health (MINSA) and provides full subsidization to the poor and extreme poor, and partial subsidization to low income self-employed citizens and their families, workers of micro-enterprises and informal workers. The scheme relies on an exclusive physician and hospital network (7) that has approximately 430 healthcare centers distributed over the country composed mostly of hospitals and health posts. The city of Lima has the highest density (8) of healthcare centers. Since its creation, the percentage of people affiliated to SIS has increased from 17% in 2007 to around 47% of the total population in 2017. SIS is currently the largest health insurance scheme in Peru (9). Alongside SIS, EsSalud, a standard contributory health insurance scheme regulated by the Ministry of Labour and Employment Promotion, provides coverage for people employed in the formal sector and represents the second most common insurance scheme (25%) (10), with around 380 healthcare centers (90 of them hospitals) distributed across the country. At least half of these hospitals are located in Lima (11). Employers can also opt to provide additional coverage by enrolling in the so-called EPS (Empresa Prestadora de Servicios), the equivalent to a complementary private health insurance with a dedicated network of private providers, chosen by each EPS independently (12, 13) . Citizens serving in the marine, police or army (FFAA/Police) as well as their families have a special insurance and their own exclusive hospital and physician network (12). Individuals can also purchase Private Health Insurance (PHI), as a complement to any other scheme (except the SIS) or as main insurance (14). The percentage of people enrolled in EPS, FFAA/Police or PHI is around 5% (10).

The introduction of SIS has led to one of the most remarkable increases in coverage in Latin America, leading to expansions in primary healthcare coverage (3) and reductions in health-related out-of-pocket expenditures (15, 16). Little is known, however, about the extent to which inequities in coverage persist in spite of a system design, which, through the implementation of multiple schemes, should in principle guarantee inclusion in a formal social health protection scheme to all segments of a population (8). Official statistics indicate that at the end of 2017, 76.4% of all Peruvians enjoyed coverage through one of the above-mentioned schemes. Yet, evidence is lacking on sources of inequities in coverage, i.e. understanding why a fourth of the population continues not to be included in any formal social health protection scheme.

Our study aimed to fill this gap in knowledge by exploring the specific determinants of insurance coverage among women of reproductive age. The decision to focus on women emerged in response to a recent call to generate more evidence on women’s inclusion in social protection mechanisms as a result of recent health financing reforms (17, 18). Limiting our sample exclusively to women of reproductive age

rather than including women of all ages was dictated by data availability. The ultimate objective of our analysis was to generate evidence to enhance targeting of those individuals not yet covered by any of the existing insurance schemes.

## Methods

### *Study design and data*

This cross-sectional study used data from the 2017 round of ENDES (“Encuesta Nacional Demográfica y de Salud Familiar”), a nationally representative survey designed for Peruvian women aged 15-49 years old and carried out yearly by the Peruvian National Institute of Statistics and Informatics (“Instituto Nacional de Estadística e Informática”/ “INEI”), following the model and methodology of the Demographic and Health Survey (DHS) program (19). The survey includes respondents’ basic characteristics (socioeconomic status, demographics, household characteristics), their insurance status, information about their reproductive health, maternal health care, domestic violence, use of contraceptive methods, AIDS prevalence and prevention, vaccination status and information about their under 5-years-old children and partner’s characteristics (20).

Data collection was conducted between March and December 2017, recollecting information from 35190 Peruvian households, where a total of 34002 women were selected to be interviewed and from which 33168 complete interviews were registered (21). This is also the total number of observations we included in our study. The authors were not directly involved in data collection and obtained fully-anonymized data directly from the INEI webpage (20). For the analysis presented in this study, we used data from the respondents’ basic demographic and socio-economic sections and their insurance status. Data downloaded across sections were merged using the respondents’ unique identifiers.

### *Measurements*

Table 1 reports all variables used in our study, their measurement and the expected association with the outcome variable. Health insurance status served as the **outcome variable** and was defined in terms of the specific health insurance coverage enjoyed by the women included in the survey. It was coded as a categorical variable with three possible outcome values to reflect the insurance landscape of Peru: No Insurance; SIS and Standard Insurance. Under the term “Standard Insurance”, we included women covered by any insurance scheme exclusive for the formal sector, such as EsSalud, Armed forces/Police Health Insurance (FFFAA/Police), EPS, or private health insurance (PHI). Some women in this last group may not be proper formal workers but receive direct coverage from their spouses. At the analytical level, this categorization allowed us to explore the extent to which SIS effectively reached those women it intended to cover and to assess which women still enjoy no insurance coverage at all.

**Explanatory variables** were selected on the basis of prior studies having identified them as relevant in relation to health insurance coverage (22-28). Most explanatory variables are self-explanatory.

In the survey, the “ethnicity” variable was generated based on the respondents’ language, their birthplace, their cultural traditions and information obtained about their ancestors and relatives. We respected this pre-generated self-identification variable from the INEI (29) and regrouped it in two categories, differentiating the main ethnicity, namely “Spanish”, from “Other”, a category set to include all other ethnicities in Peru (“Quechua”, “Aymara”, other indigenous or foreign ethnicities).

The wealth index variable was generated by the INEI at the household level, based on a composite measure that reflects households’ living conditions and ownership of a variety of assets, following the model established by the DHS (30, 31) . Using this same composite measure, we classified women in five quintiles from “poorest” to “wealthiest”.

## INSERT TABLE 1

### *Analytical approach*

First, we performed descriptive analyses to explore the distribution of both the outcome and the explanatory variables (Table 2). Second, to determine which explanatory variables should be included in our model, we performed bivariate analyses and identified significant associations using a chi-squared test of independence for the categorical variables and an ANOVA test for the continuous ones (Table 3). Across all analyses, individual information was adjusted to ensure population representativeness using the weights provided by the INEI (20).

Third, we performed a multinomial logistic regression (MNL) to identify determinants of health insurance coverage using “No Insurance” as base category and comparing it to “SIS” and to “Standard Insurance”, respectively. The model included the variable “Region” as fixed effects to account for any variance attributable to regional-level characteristics.

The model can be expressed as (32):

$$\Pr (Y_i = M) = \frac{\exp (\beta_{Mi} x_i)}{\sum_1^M \exp (\beta_{1i} x_i)}, \text{ for } M = 1, 2 \text{ or } 3$$

Here “M=1” refers to “No Insurance”, “M=2” to “SIS” and “M=3” to “Standard Insurance”. We selected “No Insurance” as a base category to ease interpretations of the findings by focusing on conceptually relevant comparisons.

The results are presented in terms of relative risk ratios (RRR), 95% confidence intervals, and relevant p-values. To test if the model meets the assumption of independence of irrelevant alternatives (IIA), meaning that the addition or deletion of variables should not affect the results showed in the regression, we performed a Small-Hsiao test (33), which confirmed the IIA assumption was not violated.

The statistical analysis was performed using STATA 15.1.

# Results

## Descriptive statistics

Table 2 summarizes the sample characteristics. Out of a total of 33168 women included in our sample, 25.3% did not have any insurance coverage, 45.5% were affiliated to the SIS and 29.2% had “Standard Insurance” (EsSalud, FFAA/Police, EPS, PHI). The average age was 31, with a SD of 9.8. Nearly 80% of all women interviewed had completed at least secondary education. Most women were identified as “Spanish” (93.6%), were married (56.6%), were urban residents (80.6%) and were working in the week prior to the interview (63.4%). Around 30% of all women had given birth to one or more children in the five years prior to the survey.

### INSERT TABLE 2

Findings from the bivariate analysis (Table 3) indicated the existence of a significant association between all explanatory variables and the outcome variable “health insurance status”. The average age among women in the SIS group was 30.4, with a SD of 9.9. They were found to have lower educational levels (around 80% with secondary as the highest educational level attained), belonged to other ethnicities (11.1%), lived in rural areas (33.4%), were poorer and less likely to have been working (42.4%).

On the other hand, women in the “Standard Insurance” group had an average age of 33.1 (SD=9.4) and were found to be more educated (around 50% with higher education than secondary), more likely to be “Spanish” (98.7%), more likely to live in urban settings (95.3%), were wealthier and more likely to have been working (72.3%).

More than 75% of the uninsured women reported at least “Secondary” as the highest educational level attained, were identified as “Spanish”, belonged to a wealth index group higher than “poorer” and reported to live in urban settings. The proportion of marriage, living children and births in the five years prior to the survey was reported to be lower in this group than in the other groups.

### INSERT TABLE 3

Results of the MNLR (Table 4) confirmed that compared to women with no insurance, women with “SIS” coverage were younger (RRR=0.99), less likely to be Spanish (RRR=0.78), less likely to have completed secondary- (RRR=0.84), higher- (RRR=0.65) or university education (RRR=0.51), less likely to reside in urban settings (RRR=0.85), less likely to belong to wealthier groups (RRR=0.28 for “Wealthier” and RRR=0.18 for “Wealthiest”), and less likely to have been working (RRR=0.86). Having three or more living children and belonging to a household with seven or more members also increased the likelihood to belong to this group (RRR=1.23 and 1.20 respectively).

Meanwhile, women with “Standard Insurance” coverage were more likely to be older (RRR=1.03 for each increasing year of age), more likely to be better educated (RRR=2.50 for higher-but-not university and RRR=3.65 for university or postgraduate), more likely to be “Spanish” (RRR=1.56), more likely to be

wealthier (RRR=3.53 and 4.74), and to have been working (RRR=1.24). Contrary to our expectations, the MNL reported urban resident women to be less likely to have “Standard Insurance” (RRR= 0.87).

## INSERT TABLE 4

## Discussion

This study makes an important contribution to the existing literature because it is one of few studies addressing factors associated with health insurance coverage in Peru. Prior studies have focused on examining the effects of increasing insurance coverage on access to services (34) and financial protection (15, 16), but they did not examine in detail determinants of insurance coverage. Moreover, with its narrow focus on women, our study expands the very limited literature on health financing and gender, highlighting coverage gaps specifically for women (18).

Our study confirmed almost all the expected associations indicated in Table 1, except for “Age”, where every increasing year of age made it more likely that the individual would have “Standard Insurance” and decreased the likelihood of them having SIS coverage.

Our findings reveal that in spite of the efforts made by government over the last few years, a relatively large proportion of women (about 25%) still has no insurance coverage and as such does not enjoy any financial risk protection in case of illness. This value is aligned with official population-based estimates, suggesting that following the introduction of SIS in the early 2000s, the proportion of uninsured people decreased from 57.7% in 2007 to 24.5% in 2017 (10), and in the case of women to around 22% in 2017 (35). The results from our study are consistent with national estimates, which reported that the proportion of uninsured women was lower (22.1%) compared with men (27.2%)(9). Based on these facts, we can conclude that women did not seem to suffer additional barriers to enrolling in a health insurance scheme, SIS in particular, compared to men.

Our findings are worrisome since they indicate that compared with other LAC countries such as Colombia, Brazil or Chile, where insurance coverage has reached 90% (36, 37), Peru still lags behind when it comes to securing social health protection via public channels. However, we must acknowledge that the information from these countries was not stratified and therefore may hide inequities in terms of gendered health access. Hence, these values might not be fully comparable with our current findings.

At first, this gap in coverage may appear surprising considering that SIS was launched with the specific intention of fostering progress towards UHC by increasing insurance coverage. Looking at the history of the scheme and its development over time, however, we note that SIS was a targeted scheme, specifically launched to ensure coverage of vulnerable populations working in the informal sector (not women per se) (6). Highlighting the existence of a positive association between SIS coverage and lower socio-economic status, lower education, rural settings and no current employment, our findings suggest that SIS was largely successful in reaching a considerable portion of the Peruvian population it intended to reach. However, contrary to our expectations, women living in urban settings were also less likely to belong to

the “Standard Insurance” group. This may be due to increasing lower income settlements in cities, however further research is recommended to explain this result.

In our study, surprisingly, the uninsured women were neither necessarily the poorest and less educated, nor the best educated and richest; moreover, they represented the middle class of the population. These women also reported to be unmarried, had Spanish ethnicity, were more likely to reside in urban settings and had fewer or no children compared with insured women.

These findings might directly point at problems derived from fragmentation in health financing structures. As mentioned before, most LAC countries have decided to keep some level of fragmentation in the financing and organization of health systems, having a specific tax-financed insurance for the poor coexisting with a social health insurance for formal workers (2, 38). However, despite the increase of population coverage, the existence of multiple pools, each targeting a specific segment of the population, inevitably leaves some women more exposed to the risk associated with falling ill (39) and leads to inequities and inefficiencies in the region (40, 41).

One of the remaining challenges for the Peruvian Government in the coming years is to target this group of insured people, keep increasing population coverage and overcome inequities in the country (42). Therefore, they have introduced a special SIS insurance package which isn't exclusively for the poorest, but also allows workers from the informal sector, who don't necessarily live in extreme poverty, to enroll onto this insurance by paying small monthly fees and accessing the national physician and hospital network of the SIS. However, previous research has reported (2, 43) that in order to reduce inequities the focus should be on increasing quantities of pooled financing rather than having a fragmented health system. Authors have suggested that these are necessary conditions to keep progressing toward UHC in Latin America.

### **Methodological considerations**

The key strengths of this study lie in its large sample size, the exclusive focus on women, and its analytical approach. Nevertheless, we must acknowledge several weaknesses. First, given that we relied on secondary data, our sample is limited to women of reproductive age (15-49 years old), hence not representing all women in the country. We cannot exclude the possibility that different, possibly lower, coverage rates would pertain to younger and older women, possibly due to gaps in their knowledge of their entitlements. Second, also because we worked with secondary data, we were forcibly limited to working with variables included in the original survey. For instance, we could not look at the role that distance to public offices and/or health facilities plays in shaping insurance coverage in Peru. Similarly, we had no information on household heads and hence could not relate women's insurance status to that of their households.

## **Conclusions**

In line with existing literature, our study confirms that the introduction of government-subsidized schemes has surely contributed to increasing financial protection for the most vulnerable in Peru. However, targeting specifically the poorest and most vulnerable has left a significant group of the women uninsured, generating inequities in health access. SIS has fulfilled its goal as a targeted scheme and its creation has surely fostered progress toward UHC, but on its own, it has proven to be insufficient to reach universal coverage. Further reforms are needed to offer coverage to currently uninsured women, either through expansion of existing schemes or by reducing fragmentation in resource generation and integrating multiple population sectors into a single scheme.

## Abbreviations

**SDG** Sustainable Development Goals

**UHC** Universal Health Coverage

**LAC** Latin America and the Caribbean

**SIS** “Seguro Integral de Salud”

**MINSA** Peruvian Ministry of Health

**EPS** “Empresa Prestadora de Servicios”

**FFAA/Police** Marine, police or army

**ENDES** “Encuesta Nacional Demográfica y de Salud Familiar”

**INEI** “Instituto Nacional de Estadística e Informática”

**DHS** Demographic and Health Survey

**PHI** Private health insurance

**MNLR** Multinomial logistic regression

**IIA** independence of irrelevant alternatives

**RRR** Relative-risk ratio

## Declarations

### *Ethics approval and consent to participate*

According to the regulations of our institution, the study did not require ethical approval since we worked with secondary fully anonymized data provided by the INEI.

### ***Consent for publication***

Not applicable

### ***Availability of data and material***

The datasets analyzed during the current study are available in the INEI repository and are freely accessible under [http://webinei.inei.gob.pe/anda\\_inei/index.php/catalog/649/datafile/F4/V131](http://webinei.inei.gob.pe/anda_inei/index.php/catalog/649/datafile/F4/V131)

### ***Competing interests***

The authors declare no competing interest.

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### ***Authors' contribution***

ERR and MDA are responsible for the overall study design. The analytical strategy was defined by ERR, MDA and VW, with contributions by SB. ERR conducted the analysis, with support from all other authors. ERR and MDA drafted the manuscript, with contributions from all other authors. All authors read and approved the final manuscript.

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## Tables

Table 1: Summary of variables				
Variable category	Variable	Categorization		
Outcome	Health insurance status	1 = No insurance 2 = SIS (“Integrated Health Insurance”) 3 = Standard Insurance (EsSalud, EPS, FFAA/Police, PHI)		
			Expected sign of association	
			SIS	Other insurance
Explanatory variables	Highest educational level attained	0 = Primary or no education 1 = Secondary 2 = Higher but no university 3 = Higher, university or Postgraduate	-	+
	Ethnicity	0 = Other 1 = Spanish	-	+
	Marital status	0 = Not currently married 1 = Currently married	+	+
	Place of residence	0 = Rural 1 = Urban	-	+
	Wealth index	0 = Poorest 1 = Poorer 2 = Middle 3 = Wealthier 4 = Wealthiest	-	+
	Currently working	0 = No 1 = Yes	-	+
	Births in last 5 years	0 = 0 births 1 = 1 or more births	+	+
	Total living children	0 = 0 children 1 = 1-2 children 2 = 3 or more children	+	-
	Household size	0 = 1-3 members 1 = 4-6 members 2 = 7 or more members	+	-
	Age	continuous	+	+

<b>Table 2: Sample characteristics (N=33168)</b>		
<b>Outcome variable</b>	<b>N</b>	<b>%</b>
<b>Health insurance status</b>		
No insurance	8391	25.3
SIS	15087	45.5
Standard Insurance (EsSalud, FFAA/Police, EPS, Private)	9690	29.2
<b>Explanatory variables</b>		
<b>Highest educational level attained</b>		
Primary or no education	5969	17.9
Secondary	15140	45.7
Higher but no university	6068	15.3
Higher, university or Postgraduate	5991	18.1
<b>Ethnicity</b>		
Other	2117	6.4
Spanish	31051	93.6
<b>Marital status</b>		
Not currently married	14395	43.4
Currently married	18773	56.6
<b>Place of residence</b>		
Rural	6432	19.4
Urban	26736	80.6
<b>Wealth index</b>		
Poorest	5535	17.0
Poorer	6842	20.6
Middle	7127	21.5
Wealthier	6943	20.9
Wealthiest	6720	20.3
<b>Currently working</b>		
No	12128	36.6
Yes	21040	63.4
<b>Births in last 5 years</b>		
0	23418	70.6
1+	9750	29.4
<b>Total living children</b>		
0	10582	31.9
1-2	14455	43.6
3+	8131	24.5
<b>Household size</b>		
1-3	9402	28.4
4-6	19088	57.6
7+	4678	14.0
<b>Age</b>		
15-49 (continuous)	Mean	SD
	31.3	9.8

<b>Table 3: Bivariate analysis</b>				
<b>Variable</b>	<b>Health insurance status</b>			
<b>Highest educational level attained</b>	<b>No Insurance (% column)</b>	<b>SIS (% column)</b>	<b>Standard Insurance (% column)</b>	<b>Chi-square p-value</b>
Primary or no education	13.0	29.2	4.8	<0.001
Secondary	47.9	51.6	34.4	
Higher but no university	19.6	12.5	26.2	
Higher, university or Postgraduate	19.4	6.7	34.6	
<b>Ethnicity</b>				
Other	3.8	11.1	1.3	<0.001
Spanish	96.2	88.9	98.7	
<b>Marital status</b>				
Not currently married	54.2	37.9	45.6	<0.001
Currently married	45.8	62.1	57.4	
<b>Place of residence</b>				
Rural	11.3	33.4	4.7	<0.001
Urban	88.7	66.6	95.3	
<b>Wealth index</b>				
Poorest	8.3	31.0	1.7	<0.001
Poorer	18.8	28.4	10.0	
Middle	23.7	21.5	19.7	
Wealthier	26.1	12.8	29.0	
Wealthiest	23.1	6.3	39.6	
<b>Currently working</b>				
No	36.4	42.4	27.7	<0.001
Yes	63.6	57.7	72.3	
<b>Births in last 5 years</b>				
0	79.7	63.4	73.9	<0.001
1+	20.3	36.6	26.1	
<b>Total living children</b>				
0	41.1	26.0	33.1	<0.001
1-2	37.4	43.8	27.7	
3+	24.5	30.2	18.2	
<b>Household number</b>				
1-3	30.5	26.8	28.9	<0.001
4-6	55.7	57.1	59.9	
7+	13.8	16.1	11.2	
<b>Age</b>	<b>No insurance Mean (SD)</b>	<b>SIS Mean (SD)</b>	<b>Standard Insurance Mean (SD)</b>	<b>Anova (p-value)</b>
15-49 (continuous)	30.61 (9.97)	30.41 (9.85)	33.11 (9.44)	<0.001

Table 4: Results from the multinomial logistic model using "No Insurance" as base outcome		
	SIS	Standard Insurance
<b>Highest educational level attained</b>		
Primary (Ref.)	1.00	1.00
Secondary	0.84 (0.76-0.92) ***	1.76 (1.55-2.01) ***
Higher, but no university	0.65 (0.58-0.73) ***	2.50 (2.17-2.87) ***
Higher, university or Postgraduate	0.51 (0.45-0.58) ***	3.65 (3.16-4.22) ***
<b>Ethnicity</b>		
Other: Quechua, Aymara, etc. (Ref.)	1.00	1.00
Spanish	0.78 (0.67-0.90) **	1.56 (1.24-1.98) ***
<b>Marital status</b>		
Not currently married (Ref.)	1.00	1.00
Currently married	1.20 (1.11-1.29) ***	1.61 (1.49-1.74) ***
<b>Place of residence</b>		
Rural (Ref.)	1.00	1.00
Urban	0.85 (0.76-0.96) ***	0.87 (0.75-1.02) *
<b>Total births in last 5 years</b>		
0 (Ref.)	1.00	1.00
1+	1.54 (1.42-1.67) ***	1.29 (1.18-1.41) ***
<b>Total living children</b>		
0 (Ref.)	1.00	1.00
1-2	1.39 (1.25-1.54) ***	1.03 (0.93-1.14)
3+	1.23 (1.07-1.40) ***	0.80 (0.70-0.91) ***
<b>Wealth index</b>		
Poorest (Ref.)	1.00	1.00
Poorer	0.61 (0.54-0.69) ***	2.15 (1.74-2.66) ***
Middle	0.46 (0.40-0.52) ***	3.05 (2.44-3.80) ***
Wealthier	0.28 (0.24-0.32) ***	3.53 (2.82-4.42) ***
Wealthiest	0.18 (0.15-0.21) ***	4.74 (3.77-5.97) ***
<b>Currently working</b>		
No (Ref.)	1.00	1.00
Yes	0.86 (0.81-0.92) **	1.24 (1.15-1.33) ***
<b>Household size</b>		
1-3 (Ref.)	1.00	1.00
4-6	1.13 (1.06-1.21) ***	1.15 (1.07-1.23) **
7+	1.20 (1.09-1.32) ***	0.96 (0.86-1.07) *
<b>Age (cont.)</b>		
	0.99 (0.98-0.99) ***	1.03 (1.02-1.03) ***
<i>Constant</i>		
	6.36 (5.15-7.86) ***	0.04 (0.03-0.05) ***
<i>Pseudo R2</i>		
	0.18	
<i>Total observations</i>		
	33168	
<p><b>Note:</b> Relative Risk Ratio and 95% confidence intervals are shown. "No Insurance" was used as base outcome. Significance level:  ***: p&lt;0.01; **: p&lt;0.05; *: p&lt;0.10</p>		