Socioeconomic inequalities in women's access to health care: has Ecuadorian health reform succeeded?

Edy Quizhpe (edyquiz@yahoo.com)  
Universidad Técnica del Norte  https://orcid.org/0000-0001-7111-5030

Miguel San Sebastian  
Unit of Epidemiology and Global Helath Umea University

Enrique Teran  
Universidad San Francisco de Quito Colegio de Ciencias de la Salud

Anni-Maria Pulkkki-Brännström  
Unit of Epidemiology and Global Health Umea University

Research

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Abstract

Background: Over the last twelve years, Ecuador has implemented a comprehensive health sector reform to ensure equitable access to health care services according to health needs. While there have been important achievements in terms of health care coverage, the effects of these reforms on socioeconomic inequalities in health care have not been analysed. This study assessed whether the health care reform implemented in the 2007 - 2017 decade contributed to reducing the socioeconomic inequalities in women's health care access.

Methods: This study was based on two waves of the Living Standards Measurement Survey conducted in Ecuador in 2006 and 2014. Data from women of reproductive age (15 to 49 years) was analysed to evaluate health care coverage in three indicators: skilled birth attendance, cervical cancer screening and the use of modern contraceptives. Absolute risk differences were calculated between the health care indicators and the socioeconomic variables using binomial regression analysis for each time period. The Slope Index of Inequality (SII) was also calculated for each socioeconomic variable and period. A multiplicative interaction term between the socioeconomic variables and period was included to assess the changes in socioeconomic inequalities in health care over time.

Results: Access to health care increased in the three studied outcomes during the health sector reform. Significant inequality reductions in skilled birth attendance were observed in all socioeconomic variables except in the occupational class. Cervical cancer screening inequalities increased according to education and occupation, but decreased by wealth. Only a decrease by education was observed for modern contraceptive use.

Conclusions: While most socioeconomic inequalities in skilled birth attendance decreased during the reform, this was not the case for inequalities in cervical cancer screening or the use of modern contraceptives. Further work is needed to address the social determinants of these health inequalities.

Background

Universal Health Coverage (UHC), defined as ensuring equitable access to health services to improve a population’s health, is proposed as a global policy by the United Nations [1]. The main components of UHC are (i) the delivery of quality essential health services according to need, and (ii) the financial protection of users from hardship, including possible impoverishment due to out-of-pocket payments [2]. Additionally, UHC means an investment in human capital to promote sustainable economic growth, development and well-being [3].

To achieve UHC, a country is required to implement relevant changes and to delineate strategies based on human rights and equity within its political processes. Interventions including a more effective health system, increased decentralisation, a high and effective social engagement, and the strengthening of regulatory frameworks have been advocated [4].

Latin America overall provides an interesting regional case in terms of health care reforms because of the strong political commitments made since the 80s aiming for UHC [5]. In several of these countries, the introduction of welfare reforms targeted to empower the poorest people, and particularly women, via conditional cash transfer schemes to reduce poverty, have resulted in an increase in access and use of maternal and child health care services [6]. Similarly, increases in the level of public health care financing have contributed to expanding coverage in socially disadvantaged groups, and reducing maternal and infant mortality. Experiences from Brazil, Costa Rica and Mexico have shown that providing financial risk protection can reduce catastrophic health expenditure among the poorest populations [4, 7]. This experience and the potential lessons learnt to other countries in similar situations or aiming for UHC was internationally acknowledged when in 2015 the Lancet published a collection of papers to chart the complex political, economic, and social forces that had shaped health policy-making when Latin American countries tried to implement health system reforms directed to achieve UHC [Ref1 [8]]. These articles provided the most extensive review about the historical process and challenges that several countries did followed over the last 30 years [Ref2 [9]]. An article by Wagstaff et al published the same year (2015) assessed the progress towards UHC using data from 112 household surveys from 1990 to 2013 for twenty Latin American countries. The overall conclusion was that all countries were progressing well in the right direction towards UHC, but still far from achieving full UHC [10]. Despite Wagstaff et al conclusion, several studies looking at the impact of the health care reforms on different aspects of the equity dimension in countries like Brazil, Mexico and Colombia have however suggested that the implemented reforms did not contribute to improve equity and fairness in the health system and therefore to achieve UHC due internal and external factors such as a huge fragmentation, poor delivery and unsustainable financing of health system. (Refs 3-4 [11, 12], [13].

Ecuador is an upper-middle income country, with high income inequality (Gini index 44.7 in 2017) and an ethnically diverse population. The majority are mestizos (a mixture between Spanish and indigenous people) but 28% belong to ethnic minorities, including indigenous, Afro-Ecuadorian descendants and Montubios [14]. Between 1993 and 2006, Ecuador had eight different governments and experienced administrative instability, corruption, and social violence. Simultaneously, health care funding was slashed, and the government's role in health care decreased significantly. In 2007, however, a new political proposal to reduce poverty and socioeconomic inequalities resulted in a stable government for the following 10 years, that carried out comprehensive social and health reforms based on equity. These reforms incorporated ambitious changes to guarantee the right to health and UHC for all in Ecuador [15] [16].

Overall, few studies have assessed the impact of the Ecuadorian health care reform on the population's health. The literature has been mainly descriptive and focused on achievements in terms of coverage [19, 22]. A recent study has reported significant reductions in income inequalities in health care utilisation [23], however, no study has paid attention to the potential impact of the reform on different socioeconomic groups or specific health care outcomes.
Monitoring and evaluating progress towards UHC is fundamental to improving health policy decisions and promoting an equitable health system [24]. Moreover, evaluations must incorporate all social subgroups since national averages can mask health inequalities in most disadvantaged groups.

The aim of this study was therefore to assess whether the health care reform had any impact on progress towards UHC in Ecuador, and specifically, whether the reform contributed to decreasing socioeconomic inequalities in three indicators of health care access among women.

Methods

Study Design

A cross sectional study design was selected for this purpose. Secondary analysis based in publicly available data from the Living Standards Measurement Surveys 2006 and 2014 carried by the National Institute of Statistics and Census (INEC) (Instituto Nacional de Estadísticas y Censos) was applied [17, 25]. A total of 55,000 households in 2006 and 109,000 in 2014 were selected. The sample selection was probabilistic in both surveys, stratified and proportional to the population size. The surveys had the same set of questions in the two periods and contained specific information on housing, ethnicity, education, economic activity, health care usage and coverage.

A sub-sample of women of reproductive age (15 to 49 years) was selected from the total number of women recruited in 2006 (28,113) and in 2014 (55,397), and so the analytical sample included 13,781 women in 2006 and 26,767 women in 2014.

Data collection

Primary sampling units were defined based on the grouping of census sectors in a first stage, and households in a second stage. The houses were randomly selected from a complete and updated list of occupied households and population by assigning the same selection probability to all houses [17]. Information was collected using face-to-face interviews by a group of properly trained pollsters from the same area and using a questionnaire designed to compile data from all members of the household. Data was collected during November 2005 to October 2006 (before the reform) and from November 2013 to October 2014 (during the reform). The interviewers made as many visits as necessary to obtain information from the selected households.

Dependent variables

Two indicators that represented promotion and prevention services were selected: cervical cancer screening and modern contraceptive use. A third indicator, skilled birth attendance, was selected to represent treatment coverage. These three outcomes have been previously used to indicate progress towards UHC and were available in the surveys [10, 26, 27].

Answers to the question “Who assisted you in your last delivery?” were used to capture skilled birth attendance (SBA). We defined assistance by a skilled professional if the answer was a physician, gynaecologist, nurse or obstetrician.

Coverage of cervical cancer screening (CCS) was captured by the question “Have you ever had a Pap smear test?”, with yes or no options.

Modern contraceptive use (MCU), was assessed by asking two questions. “Are you using any contraceptive method?” was assessed via yes or no options. Those who responded positively were then asked “What methods are you using to stop you getting pregnant?”, and answers reporting female sterilisation (tubal ligation), implant, contraceptive injection, birth control pill, any type of intrauterine device, or condom (female or male condom), were considered to be using a modern contraceptive while answering other or a natural method were classified as non-modern methods.

Socioeconomic variables

Place of residence was defined as living in either an urban or a rural area. Towns with less than 5,000 inhabitants were considered rural. Ethnicity was based on self-identification, however, for data analysis only two groups were used: non-indigenous people, including white, mestizos, Afro-Ecuadorians and Montubios; and indigenous people. This division was chosen due to the small sample of some ethnic groups [28]. Education level was categorised as incomplete primary (includes illiterate; literate but no formal education; and initial education categories), primary, secondary (middle secondary and technical) and higher education (undergraduate and postgraduate). We divided occupational class into five categories according to the woman’s current occupation: managers, clerical support workers, farmers, plant and machine operators, and elementary occupations based on the international occupational classification [29]. A wealth index was generated using principal component analysis (PCA) based on household characteristics and assets (household entrance paving, roof, wall and floor material, type of house, cooking facility, cooking fuel, type of toilet, water source, lighting source, land line telephone, home internet, satellite TV, and household waste disposal). PCA was run separately for 2006 and 2014, and for each period it was divided into quintiles, with the first representing the richest one.

Data analysis

The population characteristics were summarised with descriptive statistics calculating the prevalence for each variable in 2006 and 2014. Statistical differences between the two periods of the three health outcomes were determined using chi-square tests. Regression analysis was used to calculate absolute risk differences (ARD) between the health care indicators and the socioeconomic variables. First, a binomial regression analysis for each one of the periods was applied, and then the slope index of inequality (SII) was calculated to measure the extent of socioeconomic inequalities. The SII is a
weighted measure of inequality that represents the absolute difference in the estimated values of a health indicator between the most advantaged and the most disadvantaged, while taking into consideration the size of all the other subgroups [1, 30]. *Ridit* scores, corresponding to the average cumulative proportion of the categories of each socioeconomic indicator, were created. As previously recommended [31], SII coefficients were obtained by generalized linear models, using identity link functions, with the outcome regressed on the ridit scores, separately by each socioeconomic indicator. The index is the slope of the resulting regression line, and represents the absolute difference expressed as percentage points between the fitted value of the outcome in the most- and less-advantaged on the socioeconomic scale. If there is no inequality, SII takes the value zero. Greater absolute values indicate higher levels of inequality. In this study, positive values indicate higher coverage in the advantaged subgroups and negative values indicate higher coverage in the disadvantaged subgroups. Finally, a multiplicative interaction term between the socioeconomic variables’ ridit scores and time period was included to assess the changes in socioeconomic inequalities in health care over time. Sample weights were applied to all analyses and 95% confidence intervals for significance were calculated. All analyses were conducted using the Stata 15.1 statistical software.

**Results**

**Population characteristics**

Table 1 shows the characteristics of the study population in the two periods. One third lived in rural areas and the proportion who identified as indigenous was the same over time. Nearly 40% had primary education or less in 2006, and an increase in the proportion with the lowest level of education was observed in 2014 compared to 2006. One-fifth of participants belonged to the lowest occupational class (elementary occupations) in 2006, and fewer clerical support workers but more farmers and elementary occupations were represented in the second period.

The coverage of all three health care outcomes increased significantly over time. The proportion of women attended by a skilled professional during childbirth increased from 85.6% in 2006 to 93.7% in 2014 (p-value: <0.01), the coverage of cervical cancer screening from 51.3% to 59.8% (p-value: <0.01); and the coverage of modern contraceptives use from 40.7% to 48.4% in the same period (p-value: <0.01).

**Socioeconomic inequalities in health**

Table 2 presents the absolute risk differences and slope index of inequality for skilled birth attendance. The SII was statistically significantly positive in 2006 for residence, ethnicity, education and wealth, indicating higher coverage in the socially advantaged subgroups; however, the SII was not statistically significant for occupational class. Between 2006 and 2014, statistically significant reductions in socioeconomic inequalities were observed in terms of place of residence (SII Difference = -28.11; 95% CI: -32.69 to -23.53), ethnicity (SII Difference = -27.41; 95% CI: -38.05 to -16.78), education (SII Difference = -20.04; 95% CI: -22.49 to -17.59) and wealth (SII Difference = -3.96; 95% CI: -4.47 to -3.45). In contrast, there was a significant but small increase in inequality by occupational class (SII Difference = 3.53; 95% CI: 2.75 to 4.31).

The results for the cervical cancer screening inequalities are presented in Table 3. The SII for cervical cancer screening was also statistically significantly positive for residence, ethnicity, education and wealth in 2006, but not significant for occupational class. No significant differences by residence (SII Difference = -1.96; 95% CI: -4.05, 0.13) or ethnicity (SII Difference = -0.86; 95% CI: -4.48, 2.75) were observed between the periods. Significant increases in inequality by education (SII Difference = 6.69; 95% CI: 3.15, 10.22) and occupation class (SII Difference = 3.37; 95% CI: 2.45, 4.28) were observed. The only significant observed reduction was in inequality by wealth (SII Difference = -1.76; 95% CI: -2.47, -1.06).

Patterns of social inequalities in the use of modern contraceptives for family planning were more diverse (Table 4). In 2006, the socially advantaged groups were not more prevalent except in terms of ethnicity. Between 2006 and 2014, a non-significant change in inequality by residence was observed, where coverage was higher among the rural population in 2014 (SII Difference = 3.45; 95% CI: -7.99, 10.78). No significant reductions in inequality by ethnicity were observed (SII Difference = -1.53; 95% CI: -10.50, 7.43). Significant reductions in terms of education (SII Difference = 6.91; 95% CI: 3.10, 10.72) were observed over time. Inequalities by occupation class (SII Difference = -1.88; 95% CI: -2.87, -0.08) and wealth (SII Difference = -1.79; 95% CI: -2.55, -1.02), had small significant increases.

**Discussion**

This study assessed the socioeconomic inequalities in Ecuadorian women’s health care access in the context of comprehensive social reforms based on equity, and a primary health care oriented health sector reform. The results show that during the period 2006 to 2014 access to health care increased and health inequalities across certain social groups were reduced. Despite this, some social inequalities in health care have remained or even increased over time.

**Skilled birth attendance**

Several factors can explain the moderate increase in coverage (from an already high level) observed in skilled birth attendance, such as the rise in the number of health care facilities with maternity services, the expansion of the health workforce, particularly into rural areas, the thorough implementation of the free maternity program (Ley de Maternidad Gratuita) in place since 2005, as well as the increase in enrolment on the national health insurance scheme (by public employees and farmers), which includes free maternal and child care [19, 24, 32].

Large reductions in inequalities were observed for rural, indigenous and the lowest education groups, though inequalities remained high in 2014. To improve intercultural health care, the MoH incorporated guidelines for traditional practices in all governmental health care services in 2008 [33], however,
Conclusions

This study was carried out between 2007 and 2017, and the surveys included years 2004 (pre-reform) and 2014 (during the reform). It is possible that at the end of the reform period, the causal inference of these results should be interpreted with caution. Finally, though the period of health reform assessed in this study was 2007–2017, the available surveys include years 2004 (pre-reform) and 2014 (during). It is possible that at the end of the reform period, the results could have been different. This will be possible to assess when the next round of the national survey becomes available.
Overall, the results are positive regarding the direction taken to achieve UHC. The reforms in Ecuador have allowed a successful increase in access to health care services but the decrease in socioeconomic inequalities in the examined health indicators has been limited. Most of the socioeconomic inequalities in skilled birth attendance decreased, but only small decreases were observed in cervical cancer screening and modern contraceptive use. Several interventions would be required to address the persistence of health inequalities for indigenous and rural women, such as cultural competency training for health workers and the implementation of intercultural health policies at the primary health care level, which incorporate the strong involvement of indigenous organisations. Goverment efforts are also needed to affect the social determinants of these health inequalities.

**Abbreviations**

UHC: Universal Health Coverage; LAC: Latin America and the Caribbean; MoH: Ministry of Health; INEC: Instituto Nacional de Estadísticas y Censos; SBA: Skilled Birth Attendance; CCS: Cervical Cancer Screening; MCU: Modern Contraceptive Use; PCA: Principal Component Analysis; ARD: Absolute Risk Differences; SII: Slope Index of Inequality.

**Declarations**

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**Availability of data and materials**

Data used in this study are publicly available and can be retrieved from [https://www.ecuadorencifras.gob.ec/institucional/home/](https://www.ecuadorencifras.gob.ec/institucional/home/).

**Disclaimer**

All authors declare no conflict of interest.

**Authors’ contributions**

EQ proposed the main idea for the research. EQ and MSS conceived of the study and analysed data. ET and AMP reviewed the results and discussion. All authors collaboratively developed drafted the manuscript, and approved its final version.

**Ethics approval and consent to participate**

Not applicable.

**Consent for publication**

Not applicable.

**Competing interests**

The authors declare that they have no competing interests.

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**Author details**

1 Universidad San Francisco de Quito, USFQ, Colegio Ciencias de la Salud. Quito, Ecuador.

2 Umeå University, Department of Epidemiology and Global Health, Sweden.

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Tables
Table 1

Socioeconomic characteristics of Ecuadorian women of reproductive age in 2006 and 2014.

| Variable                    | 2006 n   | (%)     | 2014 n   | (%)     |
|-----------------------------|----------|---------|----------|---------|
| Residence                   |          |         |          |         |
| Urban                       | 9355     | (67.88) | 18888    | (70.56) |
| Rural                       | 4426     | (32.12) | 7879     | (29.44) |
| Ethnicity                   |          |         |          |         |
| Whites/mestizos/afro        | 12869    | (93.38) | 24863    | (92.88) |
| Indigenous                  | 912      | (6.62)  | 1904     | (7.12)  |
| Education                   |          |         |          |         |
| Higher (highest)            | 2959     | (21.47) | 5596     | (20.91) |
| Secondary                   | 5560     | (40.34) | 11995    | (44.81) |
| Primary                     | 4392     | (31.87) | 6200     | (23.16) |
| Incomplete primary (lowest) | 870      | (6.31)  | 2976     | (11.12) |
| Occupational class          |          |         |          |         |
| Managers (highest)          | 763      | (13.95) | 2730     | (16.52) |
| Clerical support workers    | 2699     | (49.36) | 6085     | (36.81) |
| Farmers                     | 198      | (3.63)  | 1677     | (10.15) |
| Plants and machine operators| 671      | (12.28) | 1392     | (8.42)  |
| Elementary occupations (lowest) | 1136 | (20.78) | 4646     | (28.10) |
| Household wealth index      |          |         |          |         |
| 1st quintile (richest)      | 2971     | (21.69) | 8325     | (31.26) |
| 2nd quintile                | 2950     | (21.54) | 6170     | (23.17) |
| 3rd quintile                | 2958     | (21.59) | 5221     | (19.60) |
| 4th quintile                | 2485     | (18.14) | 3945     | (14.81) |
| 5th quintile (poorest)      | 2334     | (17.04) | 2974     | (11.17) |

*Sample weights were applied to calculate the prevalence.
| Prevalence                   | Absolute risk difference (ARD) | Slope index of inequality (SII) difference |
|-----------------------------|--------------------------------|-------------------------------------------|
|                             | 2006  | 2014  | 2006  | 2014  | (2006–2014) |
| Residence                   |       |       |       |       |             |
| Urban                       | 95.96 | 98.39 | Ref   | Ref   |             |
| Rural                       | 67.46 | 83.94 | 28.50 (26.37,30.62) | 14.44 (13.19,15.69) |             |
| SII                         | 57.00 (52.75,61.25) | 28.88 (26.38,31.39) | − 28.11 | (− 32.69, 23.53) |             |
| Ethnicity                   |       |       |       |       |             |
| Whites/mestizos/afr o       | 89.79 | 96.79 | Ref   | Ref   |             |
| Indigenous                  | 37.87 | 58.58 | 51.91 (47.40,56.42) | 38.20 (34.92, 41.49) |             |
| SII                         | 103.83 | 76.41 (69.85,82.98) | − 27.41 | (− 38.05, − 16.78) |             |
| Education                   |       |       |       |       |             |
| Higher (highest)            | 99.37 | 99.61 | Ref   | Ref   |             |
| Secondary                   | 94.77 | 96.95 | 4.60 (3.56,5.64) | 2.65 (2.09,3.20) |             |
| Primary                     | 73.03 | 85.62 | 26.34 (24.40,28.28) | 13.98 (12.68,15.29) |             |
| Incomplete primary (lowest) | 53.25 | 88.62 | 46.12 (39.64,52.60) | 10.98 (8.90,13.06) |             |
| SII                         | 36.06 (34.06,38.06) | 16.09 (14.74,17.29) | − 20.04 | (− 22.49, − 17.59) |             |
| Occupational class          |       |       |       |       |             |
| Managers (highest)          | 92.08 | 99.53 | Ref   | Ref   |             |
| Clerical support workers    | 92.13 | 98.03 | -0.04 (3.63,3.55) | 1.49 (0.78,2.21) |             |
| Farmers                     | 98.61 | 76.08 | − 6.52 (− 10.64, − 2.41) | 23.45 (20.57,26.32) |             |
| Plants and machine operators| 95.67 | 94.90 | 3.58 (− 7.73,0.56) | 4.63 (2.76,6.49) |             |
| Elementary occupations      | 89.01 | 85.73 | 3.07 (− 1.30,7.44) | 13.80 (12.17,15.43) |             |
| (lowest)                    |       |       |       |       |             |
| SII                         | 0.41 (− 0.44,1.26) | 3.94 (3.59,4.30) | 3.53 | (2.75,4.31) |             |
| Household wealth            |       |       |       |       |             |
| 1st quintile (highest)      | 99.49 | 99.39 | Ref   | Ref   |             |
| 2nd quintile               | 97.08 | 98.30 | 2.40 (1.31,3.49) | 1.09 (0.49,1.68) |             |
| 3rd quintile               | 92.62 | 95.52 | 6.86 (5.32,8.41) | 3.86 (2.98,4.75) |             |
| 4th quintile               | 82.09 | 90.22 | 17.39 (15.12,19.66) | 9.17 (7.77,10.58) |             |
| 5th quintile (lowest)      | 61.89 | 78.19 | 37.60 (34.87,40.32) | 21.20 (19.11,23.29) |             |
| SII                         | 7.39 (6.91,7.87) | 3.43 (3.16,3.71) | − 3.96 | (− 4.47, − 3.45) |             |

Table 2
Prevalence of coverage, absolute risk differences and slope index of inequality for skilled birth attendance.
| Residence | 2006 | 2014 | 2006 | 2014 | (2006–2014) |
|-----------|------|------|------|------|-------------|
| Urban     | 55.53| 63.13| Ref  | Ref  |             |
| Rural     | 42.33| 51.89| 13.20 (11.43,14.97) | 11.23 (9.93,12.53) |           |
| SII       | 26.40 (22.86,29.94) | 22.47 (19.87,25.07) | − 3.92 | (− 8.11, 0.26) |           |
| Ethnicity |     |      |      |      |             |
| Whites/mestizos/afr o | 52.93| 61.53| Ref  | Ref  |             |
| Indigenous| 28.17| 37.63| 24.76 (21.72,27.80) | 23.89 (21.64,26.15) |           |
| SII       | 49.52 (43.44,55.61) | 47.79 (43.28,52.31) | − 1.73 | (− 8.97,5.51) |           |
| Education |     |      |      |      |             |
| Higher (highest) | 56.34| 68.09| Ref  | Ref  |             |
| Secondary | 52.28| 58.85| 4.05 (1.83,6.27) | 9.24 (7.73,10.74) |           |
| Primary   | 51.99| 71.66| 4.35 (2.03,6.66) | − 3.56 (− 5.22, − 1.91) |       |
| Incomplete primary (lowest) | 24.26| 23.57| 32.08 (28.71,35.44) | 44.51 (42.56,46.47) |           |
| SII       | 16.84 (13.75,19.93) | 23.53 (21.43,25.64) | 6.69 | (3.15, 10.22) |           |
| Occupational class |     |      |      |      |             |
| Managers (highest) | 56.92| 80.36| Ref  | Ref  |             |
| Clerical support workers | 60.58| 69.78| − 3.65 (− 7.62, − 0.31) | 10.58 (8.69,12.46) |           |
| Farmers   | 56.41| 65.93| 0.51 (− 7.23,8.25) | 14.43 (11.72,17.14) |       |
| Plants and machine operators | 67.78| 72.29| − 10.85 (− 15.84, -5.87) | 8.07 (5.29,10.85) |           |
| Elementary occupations (lowest) | 55.40| 61.75| 1.52 (− 3.02,6.07) | 18.60 (16.56,20.65) |           |
| SII       | 0.22 (− 0.70,1.15) | 3.59 (3.12,4.06) | 3.37 | (2.45, 4.28) |           |
| Household wealth |     |      |      |      |             |
| 1st quintile (highest) | 58.79| 63.14| Ref  | Ref  |             |
| 2nd quintile | 56.06| 64.63| 2.72 (0.21,5.24) | − 1.48 (− 3.06,0.09) |       |
| 3rd quintile | 52.29| 59.14| 6.49 (3.97,9.02) | 3.99 (2.30,5.68) |           |
| 4th quintile | 48.44| 55.51| 10.35 (7.70,12.99) | 7.63 (5.76,9.49) |           |
| 5th quintile (lowest) | 37.23| 47.66| 21.55 (18.91,24.20) | 15.48 (13.40,17.55) |           |
| SII       | 5.27 (4.66,5.87) | 3.50 (3.07,3.93) | − 1.76 | (− 2.47,-1.05) |           |

Table 3
Prevalence of coverage, absolute risk differences and slope index of inequality for cervical cancer screening.
| Prevalence                  | Absolute risk difference (ARD) | Slope index of inequality (SII) difference |
|----------------------------|--------------------------------|-------------------------------------------|
|                            | 2006  | 2014  | 2006  | 2014  | (2006–2014) |
| Residence                  |       |       |       |       |             |
| Urban                      | 40.07 | 47.45 | Ref   | Ref   |             |
| Rural                      | 42.07 | 51.17 | −1.99 (−3.90, 0.08) | −3.72 (−0.51, 2.31) |             |
| SII                        | −3.99 (−7.80, 0.01) | −7.44 (−10.27, 4.62) | 3.45 (−7.99, 10.78) | |
| Ethnicity                  |       |       |       |       |             |
| Whites/mestizos/afr o      | 40.98 | 48.86 | Ref   | Ref   |             |
| Indigenous                 | 34.17 | 42.82 | 6.81 (2.84, 10.78) | 6.04 (3.42, 8.65) | −1.53 (−10.50, 7.43) |
| SII                        | 13.62 (5.68, 21.56) | 12.08 (6.85, 17.31) | −3.72 (−0.51, 2.31) | |
| Education                  |       |       |       |       |             |
| Higher (highest)           | 33.25 | 42.97 | Ref   | Ref   |             |
| Secondary                  | 39.94 | 47.32 | −6.69 (−8.87, −4.50) | −4.35 (−5.99, −2.71) |             |
| Primary                    | 49.20 | 62.57 | −15.94 (−18.30, 13.58) | −19.60 (−2.14, −17.74) |             |
| Incomplete primary (lowest)| 28.74 | 32.71 | 4.50 (0.48, 8.51) | 10.26 (7.90, 12.61) |             |
| SII                        | −15.84 (−19.07, −12.62) | −8.93 (−11.28, −6.58) | 6.91 (3.10, 10.72) |             |
| Occupational class         |       |       |       |       |             |
| Managers (highest)         | 42.91 | 43.43 | Ref   | Ref   |             |
| Clerical support workers   | 44.78 | 50.59 | −1.87 (−5.98, 2.24) | −7.15 (−9.48, −4.83) |             |
| Farmers                    | 29.97 | 61.23 | 12.93 (5.48, 20.38) | −17.80 (−20.96, −14.64) |             |
| Plants and machine operators| 36.23 | 56.41 | 6.67 (1.49, 11.86) | −12.97 (−16.32, −9.63) |             |
| Elementary occupations (lowest) | 44.89 | 50.79 | −1.97 (−6.70, 2.74) | −7.36 (−9.81, −4.90) |             |
| SII                        | 0.49 (−0.47, 1.47) | −1.38 (−1.91, −0.84) | −1.88 (−2.87, −0.08) |             |
| Household wealth           |       |       |       |       |             |
| 1st quintile (highest)     | 36.56 | 41.09 | Ref   | Ref   |             |
| 2nd quintile               | 39.43 | 49.14 | −2.86 (−5.42, −0.31) | −8.04 (−9.75, −6.33) |             |
| 3rd quintile               | 41.31 | 51.70 | −4.74 (−7.31, −2.17) | −10.60 (−12.41, −8.79) |             |
| 4th quintile               | 43.93 | 53.50 | −7.36 (−10.10, −4.62) | −12.40 (−14.40, −10.40) |             |
| 5th quintile (lowest)      | 44.04 | 56.94 | −7.48 (−10.38, −4.57) | −15.84 (−18.11, −13.58) |             |
| SII                        | −2.14 (−2.79, −1.48) | −3.93 (−4.40, −3.46) | −1.79 (−2.55, 1.02) |             |
Table 4

Prevalence of coverage, absolute risk differences and slope index of inequality for modern contraceptives use.