



FOCAL

CANADIAN FOUNDATION FOR THE AMERICAS
FONDATION CANADIENNE POUR LES AMÉRIQUES
FUNDACIÓN CANADIENSE PARA LAS AMÉRICAS
FUNDAÇÃO CANADENSE PARA AS AMÉRICAS



BOLIVIAN MATERNAL AND CHILD HEALTH POLICIES: SUCCESSES AND FAILURES

BY ERIKA SILVA
AND RICARDO BATISTA

POLICY PAPER
MAY 2010



FOCAL
1 Nicholas St., Suite 720, Ottawa, ON K1N 7B7
Tel: 613-562-0005
Fax: 613-562-2525
Email: focal@focal.ca

www.focal.ca

FOCAL projects are undertaken with the financial support of the Government of Canada provided through the Canadian International Development Agency (CIDA)



Canadian International
Development Agency Agence canadienne de
développement international

Canada

Les projets de FOCAL sont réalisés avec l'appui financier du gouvernement du Canada agissant par l'entremise de l'Agence canadienne de développement international (ACDI)

ABOUT THIS PROGRAM:

FOCAL's Health program proposes to use analytical tools in order to produce fact-based evidence about the degree of inequalities and inequities in health and their main determinants among marginalized populations such as Indigenous Peoples and Afro-descendants in Bolivia, Colombia and Peru. This initiative will assist in the identification of policy gaps for the development, discussion and exchange of more accurate health policy ideas.

Reform efforts that have been undertaken in Bolivia, and are underway today, are essentially linked with the implementation of new health insurances, conditional cash transfers and decentralization to give local governments more power to deliver more focused and effective policies. Despite these efforts, the results have fallen far short, confining improvements in access and supply of health services to urban and surrounding areas while leaving rural and marginalized populations to face growing levels of inequalities and inequities.

Executive summary

Bolivian maternal and child mortality rates are alarming: they are the highest in Latin America and the Caribbean, after Haiti. The situation is even worse for some vulnerable populations.

In a bid to improve the health of the population, especially mothers and children, Bolivian governments have implemented three successive free health insurance plans since 1994, namely the National Maternal and Child Insurance (SNMN), Basic Health Insurance (SBS) and Universal Maternal and Child Insurance (SUMI).

As expected, national maternal-child health indicators showed significant improvement, though still well below the United Nations Millennium Development Goals set for 2015. Indigenous and rural populations—which represent 60 and 37 per cent of the Bolivian population, respectively—are further away from reaching these goals due to historical gaps and lack of effective, equity-driven public policies with respect to health.

The SBS that included sexual reproductive health and family planning services for all women of childbearing age as well as the treatment and prevention of endemic diseases for the entire population was the most effective insurance plan. Indeed, it had a significant impact on maternal and neonatal mortality, particularly in rural areas and among the indigenous population.

In contrast, SUMI removed coverage for endemic diseases as well as reproductive health and family planning services for non-pregnant women, and health indicators worsened after its implementation particularly in rural areas. Inequity in health outcomes also grew because the services of high complexity that the SUMI plan made available in urban areas never reached the segment of the population that needed them most.

Based on these findings, three key policy recommendations have been formulated:

- Different policies and intervention strategies, which take into account geographic and cultural barriers, are needed for rural areas and the indigenous population.
- Before implementing universal coverage, primary care infrastructure and human resources, especially in rural areas, could be improved.
- Women of childbearing age need to be covered and birth control methods could be made available in order to reduce maternal and neonatal mortality rates.

Introduction

Bolivia is home to a culturally diverse population which, in 2009,¹ was estimated at roughly 10 million people dispersed over a large territory. Politically and administratively, Bolivia is organized into nine departments and 327 municipalities.

According to the last 2001 census, roughly 60 per cent of the population self-identified as indigenous belonging to 37 recognized ethnic groups.² The Aymaras and Quechuas make up the majority of the Bolivian population. More than 37 per cent of the general population continue to live in rural areas and, of these, 75 per cent view themselves as indigenous,³ whereas 61 per cent of the Spanish-speaking people live in urban areas.

In the absence of specific health information on the indigenous population, we have sought to map out the general distribution of the population by ethnicity in order to identify health inequalities among indigenous groups. For this purpose, we classified the nine departments as indigenous if more than 60 per cent of the people belong to a native group and as non-indigenous if more than 60 per cent of the inhabitants do not belong to any ethnic group. Consequently, Chuquisaca (61.1 per cent Quechua), La Paz (68.4 per cent Aymara), Cochabamba (66.2 per cent Quechua), Oruro (37.3 per cent Aymara and 35.7 per cent Quechua) and Potosí (77.1 per cent Quechua) are indigenous departments while Beni, Pando, Tarija and Santa Cruz are non-indigenous.

Overview of the health situation

Despite improvements in key health indicators over the last 20 years, as Demographic Health Surveys (DHS) have shown, Bolivia still has the second worst health indicators in Latin America.⁴ Life expectancy at birth is only 65 years.⁵ Maternal and infant mortality remain the highest in the region after Haiti.⁶ Communicable diseases such as malaria, Chagas disease (American trypanosomiasis) and tuberculosis are endemic and, along with HIV-AIDS and emerging diseases like dengue, constitute significant social and economic burdens. In addition, Bolivia is experiencing an epidemiological transition where chronic diseases are increasingly becoming more prevalent and straining an already weak health-care system.

With 65 per cent of the population living in poverty, Bolivia is one of the poorest countries in Latin America. According to socioeconomic indicators, poverty is also more severe and extreme among the indigenous groups⁷ and in rural areas where conditions have worsened over the last 15 years and inequalities have increased.⁸

Though available in rural areas, public services do not adequately respond to the needs of Bolivia's poorest and most excluded populations. According to a Pan American Health Organization (PAHO) study on Bolivia, the rural population is excluded from adequate services by factors that are both exogenous and endogenous to the health-care system.⁹ Exogenous factors, such as female illiteracy –a key factor—, poverty, geographic barriers, gender inequality, historic discrimination against the Indigenous People and inadequate housing, account for 60 per cent of the exclusion. Endogenous factors, which account for roughly 40 per cent, include systemic inadequacies such as the inability to solve health problems, limited coverage, frequent changes in health-care providers, or their non-responsiveness and incapacity, and differing cultural perceptions of the quality of care.¹⁰

Bolivian health-care system

The Bolivian health-care system is made up of the public sector, social security and the private sector. The public sector offers programs that focus on mothers, children and the elderly, but its capacity to solve health problems is limited and there is a shortage of human resources. For instance, in urban areas, there are 3.6 doctors per 10,000 people as opposed to 1.3 per 10,000 widely dispersed people in rural areas, according to the National Health Information System's *Annual Health Statistics for 2007*. Social security, which caters only to those employed in the formal sector, provides coverage for diseases, pre- and neonatal care, childhood care as well as occupational risks. The private sector is small and comprised of private practitioners and clinics administered by churches and other non-profit organizations. Traditional medicine, which is important in Bolivia, falls under this category.¹¹

Health services are structured into three levels based on the complexity of care provided. The first level or entry point into the system is made up of basic facilities (50.5 per cent) where a nurse assistant delivers health promotion programs, preventive care and basic health services, and health centres (42.4 per cent) where a doctor and a nurse promote health programs and offer preventive and outpatient medical care. This level accounts for 93 per cent of all the health services in Bolivia and almost all the facilities in rural areas.

The second level, found mainly in urban areas, represents 5.2 per cent of all health-care facilities and is composed of basic hospitals providing general medical care and four specialties: paediatrics, gynaecology, general surgery and traumatology. The third level, made up of general and specialized hospitals in the capital city of each department (1.9 per cent of all facilities), is operated by doctors, nurses and specialists (e.g. cardiology, neurology, urology, psychiatry, etc.). This unequal distribution of health services explains some of the disparities between the urban and rural population, since rural areas and remote communities do not have access to second or third level services.

Health policies and maternal-child health

Over the last two decades, Bolivian governments and health authorities have designed and implemented three insurance plans meant to improve the health of the population. This policy paper evaluates subsequent health outcomes and asks whether insurance plans helped the poorest and indigenous population of the country and reduced the gaps between the urban and rural population with respect to health.

Maternal-Child Health Insurance Models

In order to improve the health of the population and reduce disparities, various Bolivian national governments have implemented the following three health insurance plans as part of their official health policies since 1994: National Maternal and Child Insurance (SNMN); Basic Health Insurance (SBS); and Universal Maternal and Child Insurance (SUMI).

Despite their names, these are not insurance plans, but rather three forms of free care aimed mainly at mothers and children, designed to increase the uptake in health services by reducing or eliminating economic barriers. The following table is a summary of the three service packages implemented since 1994.

Table 1 Components of the different insurance plans in Bolivia			
	SNMN	SBS	SUMI
Start / end period	1996-1998	1998-2003	2003-present
Goal	Reduction of 50 per cent in the number of maternal deaths, reduction of 50 per cent in the deaths of children under five from pneumonia or diarrhea	Reduction of morbidity and Mortality of the most vulnerable groups of the population; improve the quality and efficiency of care with cultural adaptation	Reduction of maternal and child mortality with emphasis on neonatal mortality
Target population	Pregnant women and children under five years	Women in reproductive age, pregnant women, children under five years, general population with specific interventions for endemic diseases	Pregnant women until six months after childbirth, children under five years
Package (risks covered)	32 basic interventions corresponding to the first and second levels of care	102 basic interventions corresponding to the first and second levels of care	Comprehensive, with higher complexity of care
Coverage of services	Prenatal care, labour, delivery and postpartum care, caesarian-section, pre-eclampsia, eclampsia and other obstetrical emergencies, newborn care, neonatal asphyxia, sepsis and for children under five, treatment of pneumonia and diarrhea among others	Those of the SNMN plus: complications of the newborn, sexual reproductive health including post abortion care, birth control methods, sexually transmitted diseases, services for endemic diseases (malaria, tuberculosis, Chagas disease, etc.), selected laboratory tests, transfer of patients in obstetric emergencies, health personnel visit to rural communities without health facilities	Basic and higher complexity care for mothers and children including ambulatory care, hospitalization, diagnostic services, medical and surgical treatment with essential medication for most pathologies, and deepening of decentralization process
Place of provision	Public health facilities	Public health facilities, social security, some facilities of Churches and NGOs	Public health facilities, social security, some facilities of Churches and NGOs
Distinctions	-	Included as beneficiaries, women in sexual reproductive health age and coverage of birth control methods and endemic diseases for the general population	Restricted coverage by removing the general population and reproductive age women from the beneficiaries

Source: Prepared by the authors with information and data from UDAPE and Ministry of Health (MOH) documents

Although all three insurance schemes seek to reduce maternal and child mortality rates by providing free health care to pregnant women and children under five, there are some important differences relating mainly to the complex nature of services provided and the intended beneficiaries. The services provided under the SNMN and SBS plans amount to first and second level primary care while the SUMI plan provides advance care available mainly in third-level facilities absent in rural areas. Another difference is that while the SNMN and SUMI services are restricted to pregnant women and children under five, the SBS plan includes birth control, post-abortion care, sexual and reproductive health for women of childbearing age, as well as the diagnosis and treatment of endemic diseases —including sexually transmitted infections (STIs) and HIV— for the entire population.

Maternal-Child Health Outcomes

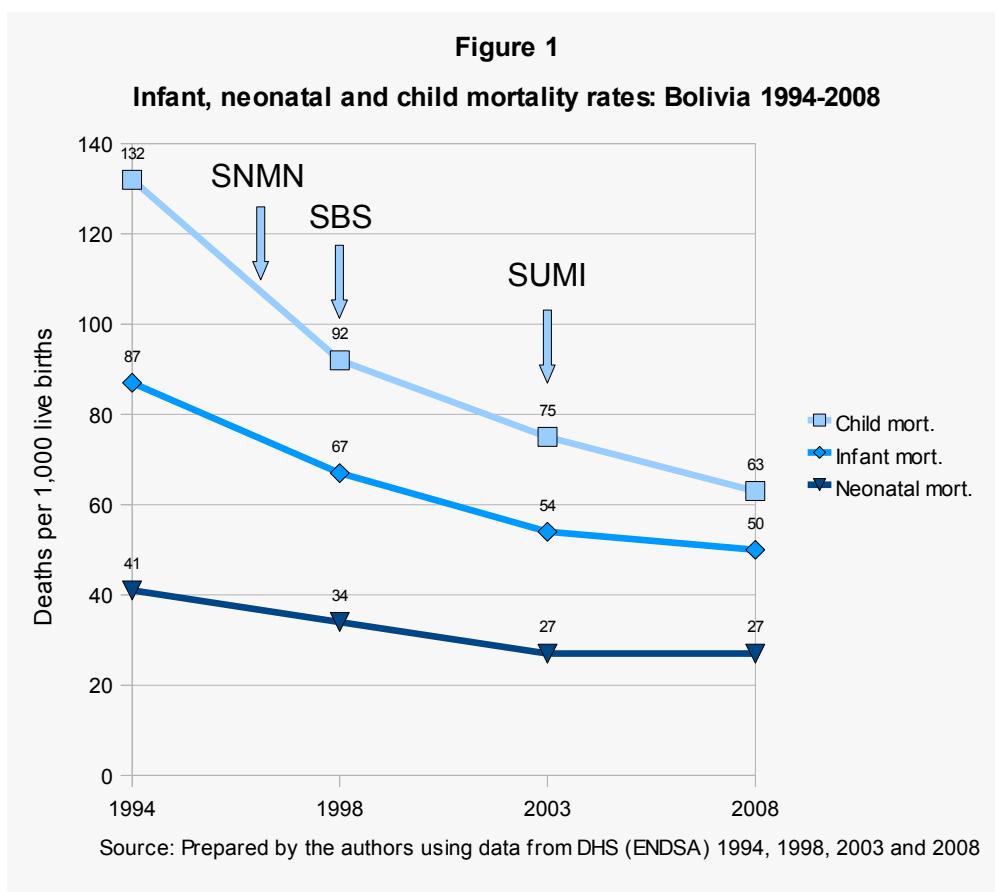
The results of the Demographic Health Surveys (DHS), which are conducted every four to five years in Bolivia, were used to analyze and establish links between health outcomes and the insurance plans. The DHS reports on national and departmental indicators and on the general

situation in both rural and urban areas. The data obtained in each DHS report shows the health situation in the years prior to the survey. Since the periods covered by surveys coincide with the implementation dates of insurance plans, the results of these plans can be monitored with the DHS.

Infant and Child Health

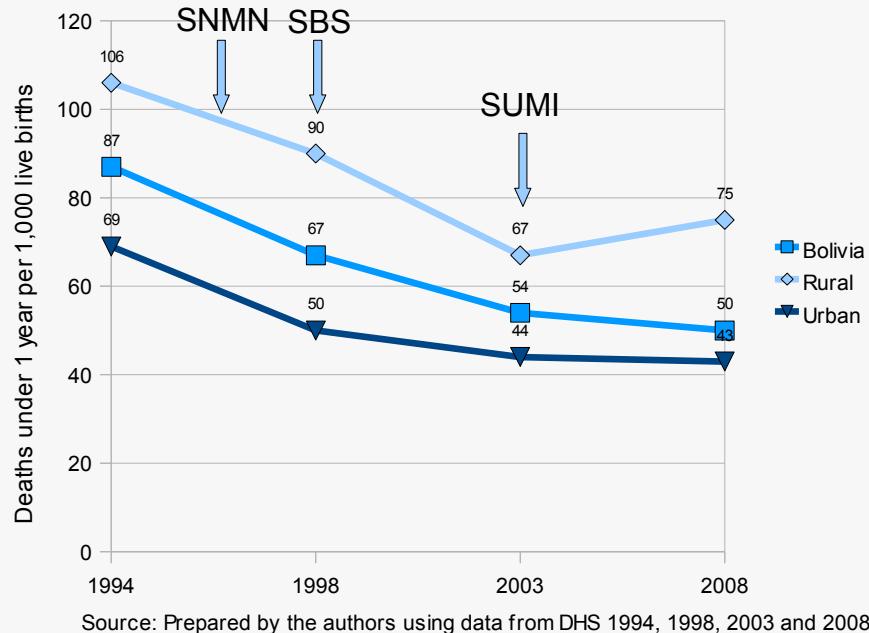
Figure 1 shows the evolution of child health over the last 15 years. Child (from birth to five years), infant (less than one year) and neonatal (from birth to 28 days) mortality rates, experienced a marked improvement from 1994 to 2003, whereas between 2003 and 2008 the progress was less evident.

Infant mortality dropped by 42.5 per cent from 1994 to 2008. Over the 15-year period, the total decline in child mortality (52.3 per cent) and neonatal mortality (34.1 per cent) was also significant (see Figure 1).

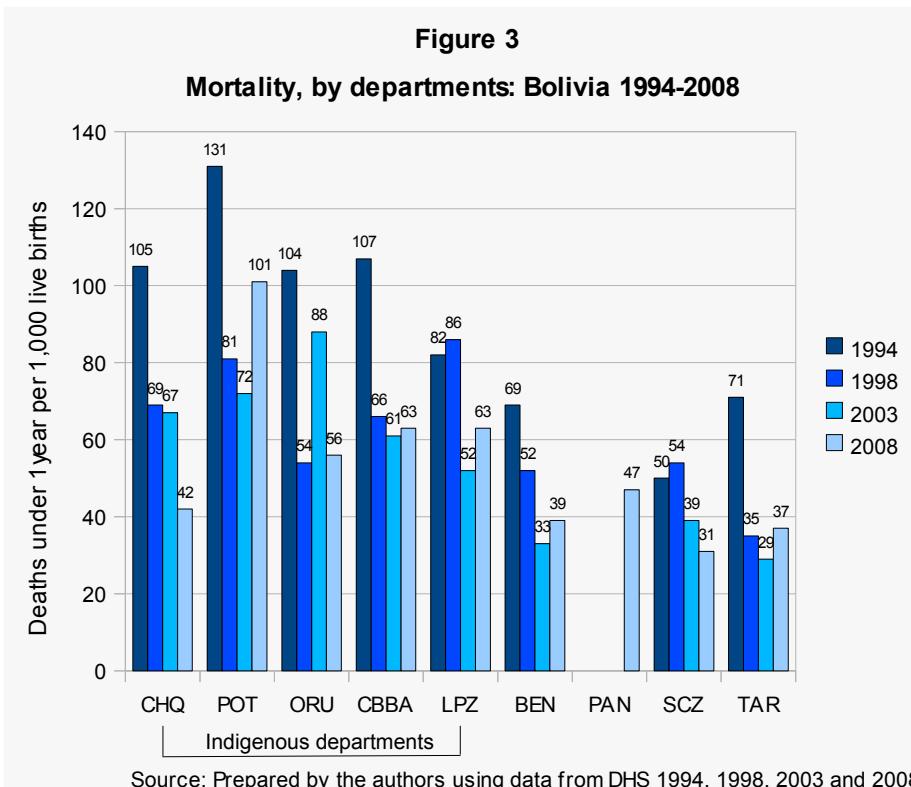


These results, however, mask important disparities that are uncovered when the rates for rural areas and the indigenous population are analyzed (see infant mortality rates in Figure 2). In general, in rural areas, all the rates are almost twice as high as those in urban areas. The total reduction in infant mortality between 1994 and 2008 was 37.7 per cent compared to 29.2 per cent in rural areas. In fact, during the last five years of implementation of SUMI, infant health in rural areas worsened.

Figure 2
Infant mortality according to area of residence: Bolivia 1994-2008



Further, when infant mortality is analyzed by ethnicity, the five indigenous departments—Chuquisaca, Cochabamba, La Paz, Oruro and Potosí (see Figure 3)—have higher mortality rates than the four non-indigenous departments. This finding is consistent with similar studies that reported greater and frequent infant deaths in the indigenous population.¹²



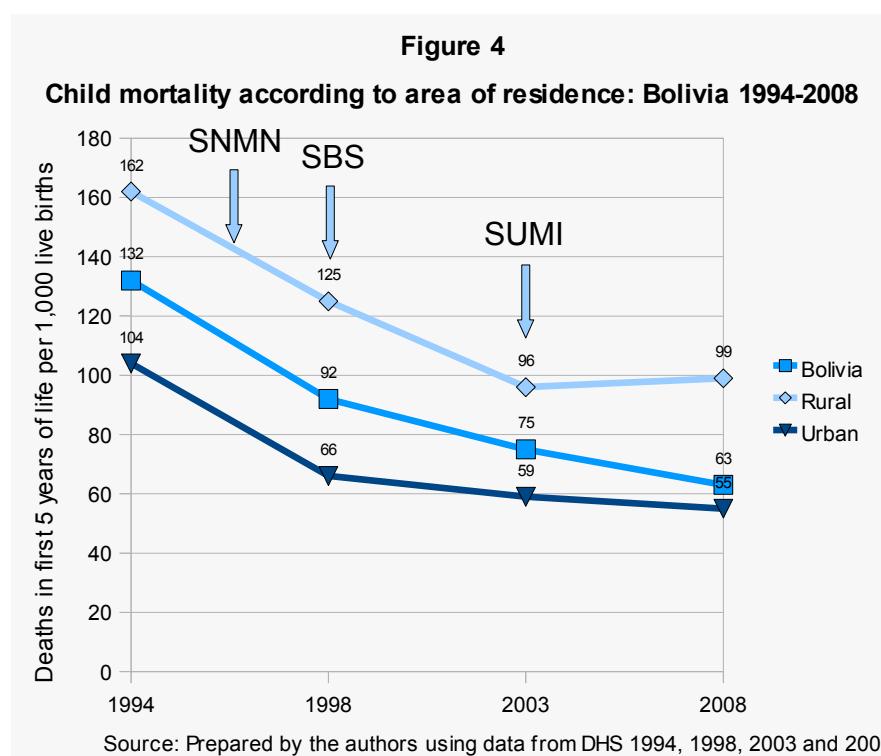
Patterns similar to those in infant mortality are observed when neonatal mortality rates are analyzed. First, with 27 deaths per 1,000 live births, neonatal mortality rates have not changed in the past five years and, in fact, rose in all departments except Chuquisaca and Oruro. Second, indigenous departments have twice the rate of non-indigenous departments and the gap between rural and urban areas almost doubled in 2008.

These results, which reveal inequalities in access to health-care services and coverage between indigenous and non-indigenous as well as rural and urban populations, can be explained by differences in policy implementation. In fact, with the exception of SBS, during the implementation of health-care insurance plans, the gap in infant mortality between urban and rural areas widened (see Figure 2).

During the period SBS was in place, neonatal mortality saw its steepest decline (20.6 per cent) and improved the most in rural areas, while the rural-urban gap narrowed (see Table 3 on page 11).

It is widely accepted that neonatal mortality is closely related to prenatal care and health care during delivery while post-neonatal mortality (i.e. deaths between 28 days and 11 months after birth) is linked to living conditions and home care. As such, it can be said that by providing basic health services at first level facilities in rural areas, SBS improved access and coverage for the rural population thus preventing neonatal deaths. In addition, by offering a wide range of mobile maternal, childhood and endemic disease prevention and therapeutic services outside of the health service facilities, SBS helped reduce post-neonatal mortality rates. Again, by reaching remote communities, hence a greater number of people, SBS was the only insurance plan that addressed geographic and economic barriers to health services.

In contrast, SUMI prioritized advanced therapeutic services (health care of second and third level) for mothers and children that are mainly available in urban centres. In doing so, SUMI created a geographic barrier and failed to address the acute needs of the rural population. In effect, these needs were neglected, neonatal mortality rose and the general health situation of the rural and indigenous population worsened. In short, Bolivia reversed the gains made with the two previous insurance schemes.



The same can be said regarding the mortality of children under five: the highest reduction occurred under the SBS plan while the rate increased in rural areas under SUMI (see Figure 4). Indigenous departments had twice the child mortality rates of non-indigenous departments.

Although not the focus of the three insurance plans, chronic malnutrition is also an important infant and child health indicator. As shown in Table 2, no improvements were observed from 1994 to 2003 for this indicator. In response, chronic malnutrition became the focus of a national program implemented in 2006 called the Zero Malnutrition Program.

Table 2 Chronic malnutrition by residence and education of the mother: Bolivia 1994-2008				
	1994	1998	2003	2008
Chronic malnutrition (%)	28.3	26.8	26.5	21.8
Urban	20.9	18.9	18.5	12.8
Rural	36.9	37.8	37	32.5
Ratio rural/urban	1.8	2.0	2.0	2.5
Without education	45.7	46.3	44.3	44.2
With higher education	14.9	12.7	9.0	6.2
Ratio without/with higher education	3.1	3.6	4.9	7.1
Indigenous departments	33.6	32.7	33.8	28.8
Non-indigenous departments	22.2	21.8	20.2	10.9
Ratio indigenous/non-indigenous departments	1.5	1.5	1.7	2.6

Source: Prepared by the authors using data from DHS 1994, 1998, 2003 and 2008

The analysis by department shows that malnutrition affects on average 28.8 per cent of the children in indigenous departments and about 10.9 per cent in non-indigenous ones. This finding is corroborated by other studies indicating that malnutrition in the indigenous population is three times as high as in the non-indigenous population.¹³

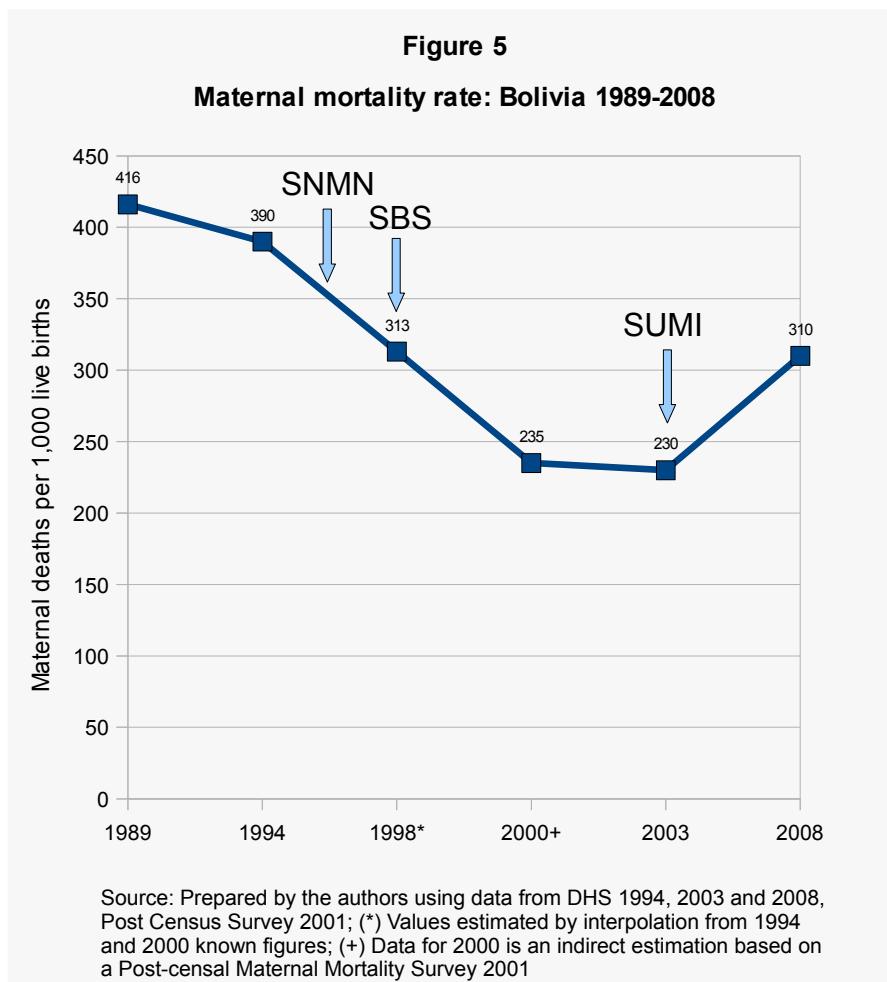
Although it is premature to draw conclusions on the impact of the Zero Malnutrition Program, the reduction in the number of malnourished children in 2008 could be attributed to it. However, as seen in Table 2, this program did not reach the most vulnerable as chronic malnutrition decreased more in non-indigenous departments and urban areas and the rural-urban gap widened. In fact, the gap is abysmal when health outcomes for the children of mothers without education are compared to those of mothers with higher education. Once again, as these results demonstrate, if well-intentioned policies do not give priority to the indigenous and rural populations through specific provisions, the population that benefits the most is the one with greater access to health services: the urban, educated, non-indigenous and affluent population.

Maternal Health

Maternal mortality in Bolivia remains one of the highest in Latin America.¹⁴ According to the 1989 DHS report, the rate was then 416 deaths per 100,000 live births. The 2015 Millennium Development Goal (MDG) for maternal mortality was set at 104 deaths per 100,000 live births. Although the maternal mortality rate has been significantly reduced, it is now apparent that this goal will not be achieved unless drastic measures are implemented country-wide.

As shown in Figure 5, maternal mortality between 1994 and 2003 declined from 390 to 230 deaths per 100,000 live births. This amounted to a 41 per cent reduction of which 26.5 per cent occurred between 1998 and 2003 when the SBS plan was in place.

In the same period, maternal mortality dropped on average by 5.3 per cent a year. This downward trend raised hopes that Bolivia was on target to meet the MDG. However, according to the latest 2008 DHS report, in the last five years of implementation of SUMI, maternal mortality rose from 230 to 310 deaths per 100,000 live births, thus reversing the gains made over the previous periods (see Figure 5 and Table 3 on page 11).¹⁵

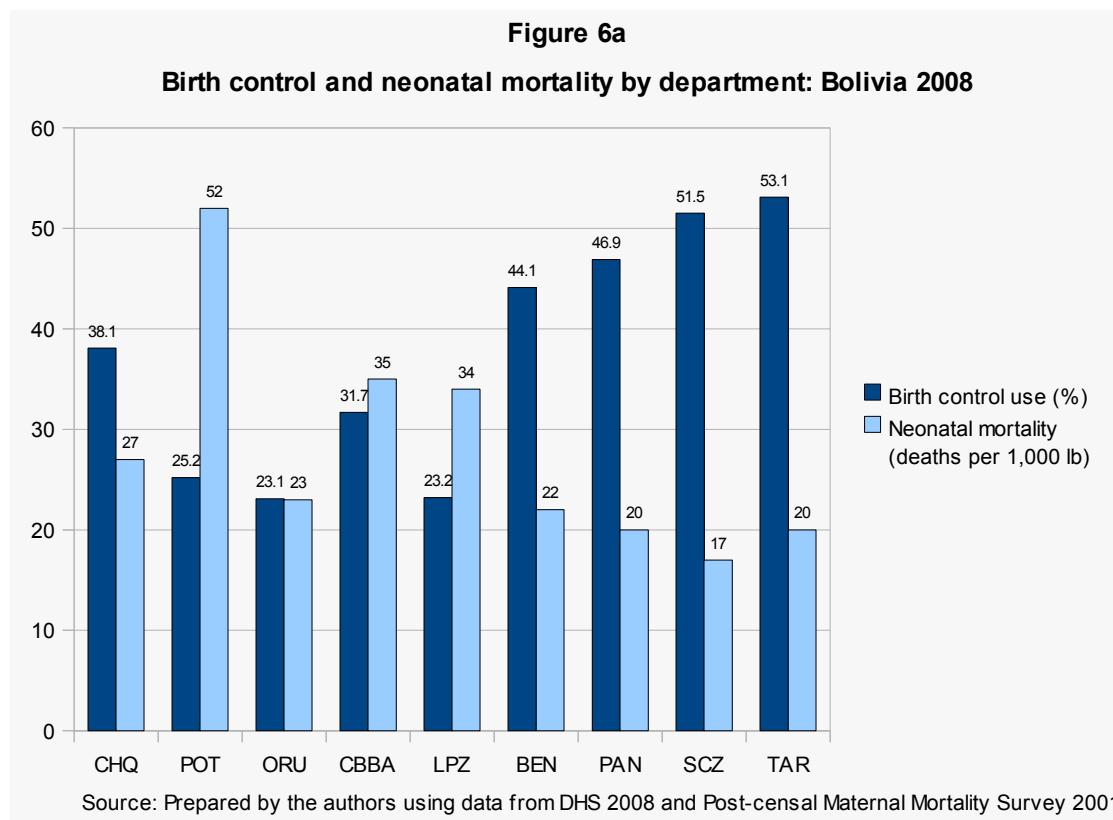


Though shocking, these results are not unexpected. SUMI eliminated not only coverage for women of childbearing age, but also access to birth control as well as information on reproductive rights. Moreover, according to other studies, SUMI neither provided right-to-health enforcement mechanisms nor ensured that a mother's nutritional status was adequate before conception and during pregnancy.¹⁶

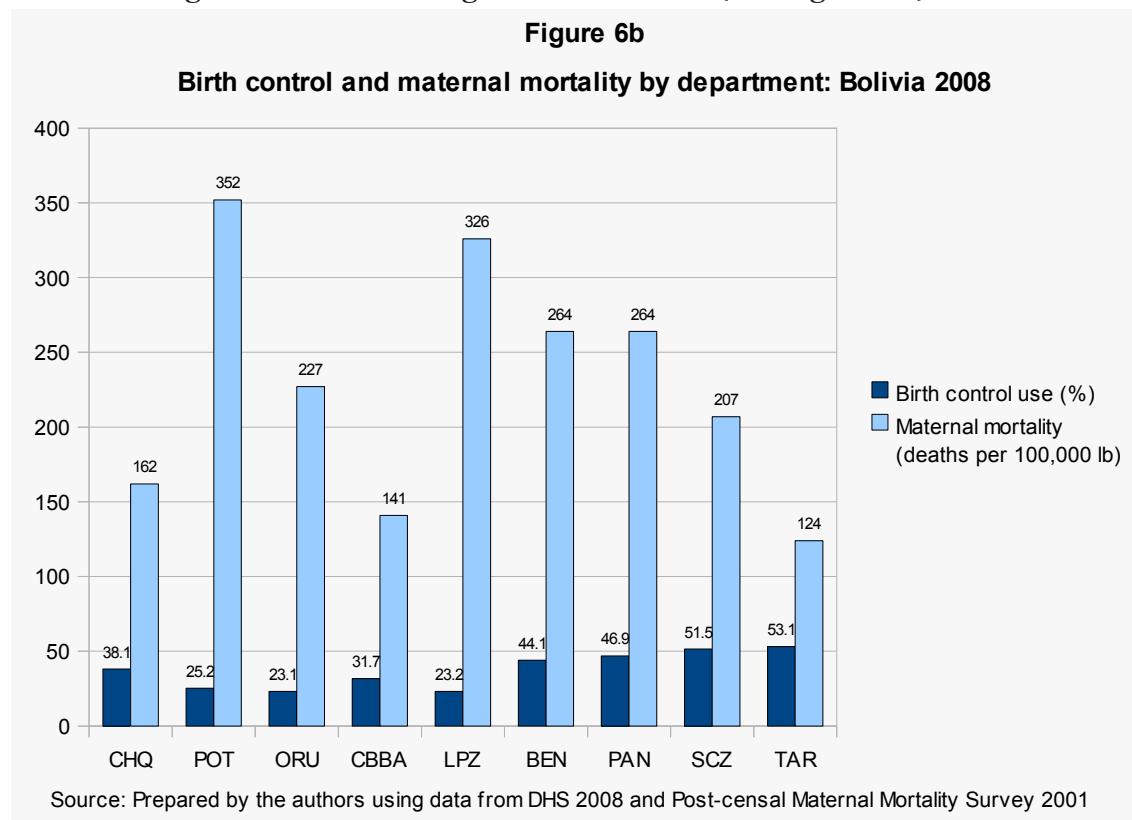
Hemorrhage during pregnancy, including abortion-related, is the primary cause of maternal mortality in Bolivia¹⁷ and abortion itself is the third cause.¹⁸ It can be speculated that the rise in mortality is due to a surge in abortions; however, further studies are needed to confirm this. Recent studies indicate that access to birth control services could prevent 75 per cent of maternal deaths and 50 per cent of neonatal deaths¹⁹ mainly by reducing abortions and unwanted pregnancies.

Data from the 2008 DHS report was used to examine the link between birth control in women of childbearing age, and maternal and neonatal mortality. The analysis showed an inverse correlation

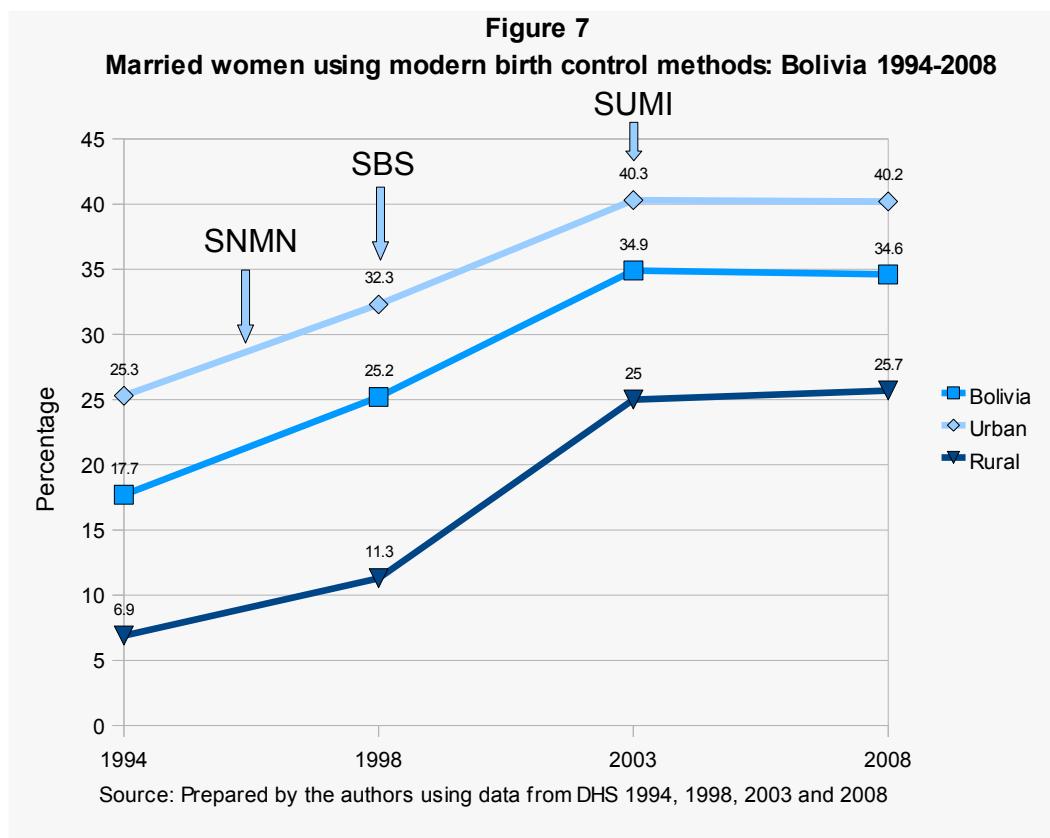
between the two in that neonatal mortality declined as birth control became prevalent. In fact, as seen in Figure 6a, the departments with the highest percentage of women on birth control have the lowest neonatal mortality.



Similarly, when analyzed by department, the 2001 maternal mortality data and 2008 statistics on birth control usage also showed a negative correlation (see Figure 6b).²⁰



Parallel to the decline in mortality rates under the SNMN and SBS plans is the progressive increase in the use of birth control between 1994 and 2003. In rural areas, the largest uptake occurred when the SBS plan was in place (see Figure 7). In contrast, under SUMI, the use of modern birth control methods did not increase in the urban and rural areas.



The percentage of birth deliveries in health service facilities is another indicator that impacts maternal and neonatal health since this indicator helps evaluate the risk mothers face when trained health personnel do not attend deliveries in a health service facility.

Following the implementation of the first insurance plan in 1994, the number of births attended in health service facilities steadily rose. The highest increase occurred between 1994 and 1998, the period during which the plans were first introduced, beginning with SNMN that lowered economic barriers.

To date, 70 per cent of deliveries are assisted in health service facilities and, with regard to this indicator, Bolivia is on track to meet the corresponding MDG. However, large inequities remain between deliveries in rural and urban areas. In 2008, only 43.7 per cent of deliveries in rural areas were done in health service facilities compared to 87.7 per cent in urban areas. It seems that SUMI has neither reached rural and remote communities nor encouraged a large number of women to demand health services. In general, the urban population is benefiting the most while the health situation is getting worse in rural areas. This gap can be explained in two ways: first, better resourced health services are mainly located in urban areas; second, the generalized free health-care offer seems to have attracted in the cities people who previously had private health-care plans. Similarly, the Social and Economic Policy Analysis Unit (UDAPE) and UNICEF Bolivia found that urban mothers with a relatively high income and educational level were the most frequent users of public health services.²¹

There is also a gap between indigenous and non-indigenous departments with respect to maternal health. All non-indigenous departments have already reached the MDG for institutional deliveries. On the contrary, La Paz, Oruro and Potosi, which are the departments with the highest rates of maternal mortality, are also the ones that have the lowest levels of institutional deliveries.

Given the economic, social and even political outcomes of implementing SUMI, it is clear that this policy has failed to address the basic health needs of the rural, poor and indigenous population that continues to suffer from high maternal and child mortality, malnutrition and infectious diseases. In addition, auxiliary nurses who are only trained to provide basic care are responsible for most health services provided in rural areas.

Table 3 Summary of changes in maternal-child health and its relation with insurance plans, 1994-2008				
Health insurance model		SNMN	SBS	SUMI
<i>Period</i>	1990-1994	1994-1998	1998-2003	2003-2008
<i>Data Source</i>	<i>DHS 1994</i>	<i>DHS 1998</i>	<i>DHS 2003</i>	<i>DHS 2008</i>
Indicator/parameter				
Infant mortality	87	67	54	50
Reduction with respect to previous measurement	-	23.0%	19.4%	7.4%
Urban/rural gap	1.5	1.8	1.5	1.7
Child mortality	132	92	75	63
Reduction with respect to previous measurement	-	30.3%	18.5%	16.0%
Urban/rural gap	1.6	1.9	1.6	1.8
Neonatal mortality	41	34	27	27
Reduction with respect to previous measurement	-	17.1%	20.6%	0
Urban/rural gap	1.8	1.8	1.7	1.7
Chronic malnutrition	28.3	26.8	26.5	21.8
Reduction with respect to previous measurement	-	5.3%	1.1%	17.7%
Urban/rural gap	1.8	2.0	2.0	2.5
Maternal mortality	390	313	230	310
Reduction with respect to previous measurement	-	19.9%	26.5%	34.8%
Urban/rural gap	1.5	-	1.4	-
Births attended in health service facilities	42.3	55.9	57.1	67.5
Reduction with respect to previous measurement	-	32.2%	2.1%	18.2%
Urban/rural gap	3.0	2.5	2.3	2.0

Source: Prepared by the authors using data from DHS 1994, 1998, 2003 and 2008

Language and cultural barriers also account for disparities in the delivery of attended birthing services. In rural areas, notably in the departments of Chuquisaca, Cochabamba, La Paz, Oruro and Potosi where the majority of monolingual indigenous women live, language barriers are significant and this partly explains why home deliveries are quite frequent. Poor quality of care can also create cultural barriers, as occurs when the attendant does not follow the cultural practices of the woman during delivery.

The education level, especially of women, is also a major exclusion factor in health as noted in a 2004 PAHO and UDAPE joint study as well as the high malnutrition rates among children of mothers without education.²² Likewise, as previous intervention projects have shown, the indigenous women in particular lack knowledge about their sexual and reproductive health, including signs of danger to their lives and those of their babies. This lack of knowledge influences attitudes or appropriate and timely care-seeking behaviour.²³ As part of its service offering, an insurance plan must therefore include educational strategies aimed specifically at women.

Conclusions

Over the last 15 years, maternal and child health was the priority of different Bolivian governments who, through various strategies, sought to improve access to health-care services and significantly improved key maternal-child health indicators. However, these improvements did not equally benefit the rural and indigenous populations that needed them the most and are not enough for Bolivia to reach the corresponding MDGs. In fact, the indigenous and rural populations are now further away from these goals due to historical gaps and lack of effective, equity-driven public policies with respect to health.

This impact analysis of the three insurance plans implemented in Bolivia shows that by providing health-care services free of charge to reduce economic barriers to access, the plans generally succeeded in leading more people to use those services. However, except for the SBS plan, they attracted mostly the urban and affluent population as evidenced by the widening gap between rural and urban areas and between indigenous and non-indigenous population.

Among the indigenous and rural population, the best results were observed from 1998 to 2003 under the SBS plan because of its focus on rural areas and some of its strategies such as providing services to remote, unserved communities, covering transportation to health centres for pregnant women and treating endemic diseases in the general population through first-level facilities.

In addition, with respect to the decline in maternal and neonatal mortality rates, the SBS plan also yielded the best results because, unlike the two other plans, it covered women of childbearing age and promoted access to sexual and reproductive health and family planning services that increased the use of modern birth control methods. In contrast, under SUMI, when women of childbearing age were excluded and access to birth control was restricted, maternal and neonatal mortality surged.

Since the implementation of SUMI in 2003, two concerns have become evident: (i) improvement in maternal-child health indicators has diminished and the situation has worsened in the case of maternal mortality; and (ii) the gaps widened between urban and rural, indigenous and non-indigenous populations as the plan's benefits accrued mostly to people living in urban areas.

Given the stagnation in health indicators and even the reversal of gains since SUMI was implemented, Bolivia is facing a difficult challenge to achieve the MDGs. The 2015 infant mortality goal of 30 deaths per 1,000 live births (using 1989 figures as the baseline) will not be reached. The goal of 104 maternal deaths per 100,000 live births is even further away.

Policy recommendations

In order to improve maternal and infant health and achieve the MDGs, Bolivia will have to redirect its strategies and interventions country-wide. As the present government is planning to implement a Universal Insurance Plan in the near future, it can seize the opportunity to amend the errors and weaknesses of the previous policies by taking into account lessons learned from previous experiences:

- It is necessary to design and implement policies and interventions adapted to the needs of rural areas and the indigenous population and to focus on the reduction of the inequities affecting these groups.
- When resources are scarce, priority could be given to interventions aimed at the indigenous departments such as Chuquisaca, Cochabamba, La Paz, Oruro and Potosí.
- Since infectious diseases are still prevalent in rural and indigenous populations, any insurance plan needs to focus on the delivery of curative, preventive and health-promotion services geared to these problems.
- Other barriers that limit access to health services such as cultural differences, lack of education, gender inequalities and geographic distances could also be considered and addressed in health policies.
- Before any insurance plan is implemented, in whole or in part, there is a need to increase health service facilities in rural areas and improve their problem-solving capacities, which involves assigning more doctors and improving the cultural sensitivity of providers.
- Women of childbearing age are a key group influencing maternal and child health outcomes and they need to always be included as principal beneficiaries in comprehensive health policies.
- In designing and implementing maternal-child health policies, adequate sexual and reproductive health services—including access to modern birth control methods—could be made available to lower maternal and neonatal mortality.

About the authors

Erika Silva is a Canadian Co-operation Health Expert and Consultant and former Director of various health projects in Bolivia. Ricardo Batista is a PAHO/WHO Epidemiologist and Research Consultant in Central America and was in charge of Surveillance and Health Analysis in the Ministry of Health and Sports of Bolivia.

Acknowledgements

The authors wish to thank Anne Marie Hodgson for her careful review of the manuscript and Ronald Rojas, Vic Neufeld and Claire de Oliveira for their valuable time, suggestions and input.

Endnotes

- 1 National Institute of Statistics of Bolivia (INE). *Proyecciones demográficas*. La Paz: INE, 2008.
- 2 INE. *Censo Nacional de Población y Viviendas. Características de la población: autoidentificación étnica*. vol. 4. La Paz: INE, 2001.
- 3 INE. *Censo Nacional de Población y Viviendas. Distribución de la población*, vol.1. La Paz: INE, 2001.
- 4 Pan American Health Organization (PAHO). *Health in the Americas 2007*. Scientific and Technical Publication no.622. Washington, D.C.: PAHO, 2007.
- 5 INE. *Estadísticas e Indicadores Económicos y Sociodemográficos de Bolivia. Actualidad Estadística Nacional*. La Paz: INE, 2009.
- 6 PAHO. *Health Situation in the Americas: Basic Indicators 2009*. Washington: PAHO, 2009.
- 7 INE. *Estadísticas Nacionales de Bolivia 2008*. Bulletin no.64. La Paz: INE, 2008.
- 8 Social and Economic Policy Analysis Unit (UDAPE) and Interinstitutional Committee on the Millennium Development Goals (CIMDM). *Quinto Informe de Progreso de los Objetivos de Desarrollo del Milenio en Bolivia*. La Paz: UDAPE and CIMDM, 2008.
- 9 UDAPE and PAHO. *Caracterización de la Exclusión en Salud en Bolivia*. La Paz: UDAPE and PAHO, 2004.
- 10 PAHO. *Exclusión en Salud: Estudios de Caso, Bolivia, El Salvador, Nicaragua, México, Honduras*. Serie Extensión de la Protección Social en Salud no.2. Washington, D.C.: PAHO, 2009.
- 11 According to the World Health Organization, traditional medicine is the body of knowledge, skills and practices derived from the theories, beliefs and experiences indigenous to various cultures, whether explicable or not, and used in maintaining health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness. For more information, visit <http://www.who.int/medicines/areas/traditional/definitions/en/index.html>.
- 12 UDAPE, United Nations System in Bolivia (NNUU) and International Labour Organization. *Pueblos Indígenas Originarios y Objetivos de Desarrollo del Milenio*. La Paz: UDAPE and NNUU, 2006, 51.
- 13 *Ibid.*, 34.
- 14 Only Haiti has a higher maternal mortality rate in the Americas with 630 maternal deaths per 100,000 live births.
- 15 The data for maternal mortality was initially published in a 2008 DHS report. However the data for maternal mortality was removed from the official publication.
- 16 UDAPE and United Nations Children Fund (UNICEF). *Bolivia: Evaluación de Impacto de los Seguros de Maternidad y Niñez en Bolivia 1989-2003*. La Paz: UDAPE and UNICEF, 2006.
- 17 Ministry of Health and Sports (MSD). *Plan Nacional de Maternidad Segura*. LaPaz: MSD, 2008.
- 18 MSD. *Plan Estratégico de Salud Sexual y Reproductiva 2009 a 2015*. Documentos Técnico Normativos no.140. La Paz: MSD, 2009.
- 19 Singh, Susheela, Jacqueline E. Darroch, Lori S. Ashford and Michael Vlassoff. *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health*. New York: Guttmacher Institute and United Nations Population Fund, 2009.
- 20 Ideally, we should compare the use of birth control methods with maternal mortality using data from the same year; however maternal mortality rates by department were not available in the DHS of 2008. As such, we used data from a maternal mortality post-census survey in 2001 assuming that the regional pattern for 2008 remains the same as in 2001; figures by department could be lower though.
- 21 UDAPE and UNICEF, 2006, *op.cit.*
- 22 UDAPE and PAHO, 2004, *op.cit.*
- 23 Silva de la Vega, Erika. *WARM II: Building Bridges between the Community and the Health Services with a Gender and Intercultural Approach. Best Practices in Gender, Ethnicity and Health*. Washington, D.C.: PAHO, 2008. http://new.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=485&Itemid (accessed April 21, 2010)

May 2010

ISBN: 978-1-894992-55-8

Publications Mail Agreement:

The Canadian Foundation for the Americas (FOCAL) is an independent, non-partisan think tank dedicated to strengthening Canadian relations with Latin America and the Caribbean through policy dialogue and analysis. By providing key stakeholders with solutions-oriented research on social, political and economic issues, we strive to create new partnerships and policy options throughout the Western Hemisphere. FOCAL promotes good governance, economic prosperity and social justice, basing our work on principles of intellectual integrity, racial diversity and gender equality.

Additional copies of this policy document may be obtained from the FOCAL web site www.focal.ca.

The opinions expressed in this paper are those of the authors and do not necessarily reflect the views of FOCAL, its board or staff.



FOCAL
1 Nicholas St., Suite 720, Ottawa, ON K1N 7B7
Tel: 613-562-0005
Fax: 613-562-2525
Email: focal@focal.ca

www.focal.ca



1, rue Nicholas Street
Suite/Bureau 720
Ottawa, Ontario K1N 7B7 Canada
Tel/Tél: 613.562.0005
Fax/Téléc: 613.562.2525
Email/Courriel: focal@focal.ca
www.focal.ca