Implementing the Census-based, Impact-Oriented Approach to Comprehensive Primary Health Care Over Three Decades in Montero, Bolivia:

1. Program Description

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Abstract

Background: Strengthening primary health care (PHC) is now widely accepted as essential for achieving global health goals, including Universal Health Coverage. However, there are few examples of innovative approaches to the provision of comprehensive PHC services that have been implemented over more than a few years and that have evidence of long-term effectiveness. In contrast, the evidence for effectiveness of selected PHC interventions assessed over shorter periods of time is abundant.

Objectives: This study describes the implementation of the census-based, impact-oriented (CBIO) approach for a program in Montero, Bolivia, managed by the *Consejo de Salud Rural Andino* (CSRA) that has been in operation for three decades, since 1988. A second paper in the series describes the effectiveness of the program, including population coverage of key interventions and changes in child and maternal mortality in the program area, over this period.

Methods: We reviewed available documents, prior evaluations, and health information system data. We carried out interviews with 19 key informants.

Results: The CSRA/Montero Comprehensive PHC Program provides services at clinics, but it also has a program of strong community outreach and community engagement that enables it to visit every household regularly, identify families with special needs, and involve the community in reviewing and addressing local health priorities. The program has been in operation for three decades at a current annual cost of US$11 per year.

Conclusions: The CSRA/Montero Comprehensive PHC Program is an example of an innovative approach to the provision of PHC that has worked effectively for three decades with the same

dedicated leadership. The Program embodies strategies that are worthy of consideration for broader replication in the global pursuit of Universal Health Coverage. Evidence of the Program's effectiveness is addressed in the following paper in this series.

Keywords: Community health; Primary health care; Universal health coverage, Maternal health; Child health; Peri-urban health; Census-based, impact-oriented (CBIO) approach; Community participation; Bolivia

Introduction

Evidence is needed regarding innovative and promising approaches that comprehensive primary health care (PHC) programs can use to achieve the current global health goals of Universal Health Coverage [1] and Ending Preventable Child and Maternal Deaths [2]. The need for accelerating progress in achieving these goals has recently been declared to be urgent by the General Assembly of the United Nations, given that the goal for achieving these goals is now less than a decade away [3]. While the scientific peer-reviewed literature is replete with examples of selective evidence-based interventions that have improved population coverage and population health for three years or less [4], there are very few examples of comprehensive, long-term comprehensive PHC programs whose effectiveness has been assessed, particularly in terms of population coverage of key evidence-based interventions and changes in mortality, over a longer period of time [5].

This article is the first of a two-part series describing a comprehensive PHC program in a peri-urban area of the city of Montero, Bolivia, that has implemented the census-based, impact-oriented (CBIO) approach over the past three decades. The second article in this series provides evidence of the program's effectiveness [6]. These two papers provide updated information about the CBIO approach in Montero that supplement earlier reports [7-9].

The CBIO approach is based on early pioneering work in north India[10-12] and Haiti [13] in the 1960s and 1970s. Many CBIO elements are also present in the pioneering work of the Jamkhed Comprehensive Rural Health Project [14-16] and the Society for Education, Action and Research in Community Health (SEARCH) [17-19], both in central India, and BRAC's urban

health program reaching more than 8 million people in Bangladesh [20]. The pioneering national PHC program of Ethiopia, now reaching 110 million people, utilizes the same programmatic approach of household enumeration, visitation of homes, and use of family health folders stored in the health post according the house's number on the community map used by CSRA in the 1980s.

A more complete description of the CBIO approach is available elsewhere [9, 21]. Its main components, as implemented in Montero, include (1) regularly updated family censuses and family health folders containing all relevant health information for the family; (2) regular periodic contacts with each family through home visits with a frequency that depends on the risk factors identified in each home; (3) the registration of vital events (births, deaths and migrations) at the time of home visits, and; (4) periodic participatory analysis of deaths and other health indicators. Its major advantage is that it provides the program with both an epidemiologically based as well as a community-directed approach to improving population health that is adjustable as changes occur in local conditions and in the local epidemiological priorities.

CBIO was developed by CSRA and Curamericas Global (then called Andean Rural Health Care), first on the Northern Altiplano of Bolivia (beginning in 1983) and later in the Cochabamba Valley (in 1987) [21]. Early progress in expanding the population coverage of key services and reducing the mortality of children younger than 5 years of age (hereafter referred to as under-5 children) has been reported elsewhere [8, 22].

Study setting

Montero is a small city with an approximate population at present of 135,000, having grown from a population of 15,000 in 1969. It is located in the Department of Santa Cruz, one of the nine departments in Bolivia, and is 50 kilometers north of the city of Santa Cruz in the tropical lowlands of eastern Bolivia (Figure 1). The city is organized into nine health districts, each with a health center to serve the residents of that district.

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Figure 1 about here

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This study focuses on the *Consejo de Salud Rural Andino* Comprehensive Primary Health Care Program in Montero (hereafter referred to as the CSRA/Montero Program) [23]. *Consejo de Salud Rural Andino* is a Spanish term that means Andean Rural Health Care. CSRA is a Bolivian NGO with historical roots to and an ongoing partnership with Curamericas Global (formerly Andean Rural Health Care), an international NGO based in Raleigh, NC, USA [24]. CSRA became an independent legal entity based in Bolivia in 1995. CSRA/Montero is a branch of CSRA.

Methods

The information provided in this article was obtained from personal experience, document review, key informant interviews, and observation of program activities. The first two authors (DCS and MCC) have been leading this program since its inception. Some of this

information was obtained by one of the co-authors (HM) and two local interviewers working with her in 2010.

Key informant interviews were conducted in 2010 using a semi-structured question guide. Objectives of the interviews were to understand the history of the program as well as best practices of CSRA, lessons learned, and impact of the program on the health of the target population. Recruitment of key informants was conducted through maximum variation sampling, criterion sampling and purposive sampling. Interviews were recorded with permission, and later transcribed and translated from Spanish to English. The qualitative data from the key informant interviews did not merit systematic analysis due to lack of depth. This was not due to poor data collection but rather to the nature of the information collected. Data gathered from observations, informal interviews and key informant interviews were synthesized into a concise history and description of the CSRA Montero program. Further details have been reported elsewhere [25].

The qualitative data collection also included observations by one of the authors (HM) of activities inside the health centers and in the program neighborhoods. Topics explored at that time included the history, current program activities, health impact, and lessons learned. Additional key informant interviews were conducted in 2019 with the program leadership staff by two of us (HP and HM).

History and program services

In 1988, under the leadership of Dr. Dardo Chavez, the CSRA/Montero Program worked with the health district of Villa Cochabamba to implement the census-based, impact-oriented (CBIO) approach [9]. The health district of Villa Cochabamba in Montero had a population of 6,000

people in 1988. The Ministry of Health was not providing any services there at that time. In 1988, the CSRA/Montero Program worked with the community to create a map of the area, carry out a census, and begin a process of routine systematic home visitation and registration of births and deaths. Through this process, it became readily apparent that the community's priority was for a clinic to provide curative PHC services.

The early epidemiological data in Villa Cochabamba demonstrated that 65% of all deaths (of all ages) occurred among under-5 children, and 87% of deaths among under-5 children occurred during the first 2 years of life, with 25% of under-5 deaths occurring between 3 and 6 months of age and 35% between 15-21 months of age [7]. Diarrhea was by far the leading cause of death of under-5 children, present in 56% of under-5 deaths [7]. A case-control study carried out at that time revealed that undernutrition was a strong predictor of mortality [7].

In response, and in collaboration with the community, the CSRA/Montero Program established the following activities:

- Extensive educational efforts on diarrhea prevention and treatment during community meetings, household visits, and patient encounters at a newly constructed clinic;
- Facilitation of connections of households in the program area to the city water system to provide clean and affordable water in the homes (an extended payment plan was arranged with the municipal water cooperative and a revolving loan fund was created for the residents of the program area);
- Installation of point-of-use improved water supply systems (using home chlorination and containers with protected tops to limit contamination) to improve the quality of

158 drinking water in homes without ready access to safe water (the CSRA/Montero
159 Program provided the site for the first demonstration of this approach, now utilized
160 throughout the world [26]);
161 • Construction of a small health clinic staffed by one auxiliary nurse that had a pharmacy
162 and laboratory along with an optical/eyeglasses shop; and,
163 • Recruitment of auxiliary nurses for routine systematic home visitation.
164
165 The CSRA/Montero Program home visitation protocol required reaching each household
166 in the program implementation area at least once a year. Families without children and without
167 women of reproductive age were visited at least once a year to verify health status, investigate
168 vital events (deaths and newborns of a relative who had arrived), and update the census
169 information; Families with a woman at reproductive age and without children were visited at
170 least every 6 months to identify any pregnancy or vital event that may have occurred. More
171 frequent visits were made to homes with pregnant women and young children. Initially, homes
172 with children younger than 24 months of age were visited by auxiliary nurses and volunteer
173 community health workers every 2 months, and children 24-59 months of age were visited
174 every 3 months. Their duties included health promotion and disease prevention by providing
175 basic community-based care and education. They also identified pregnancies, births, deaths,
176 and in-migrations. In the early 1990s, the visitation schedule for homes with children was
177 changed since the 12-59-month-old age group was no longer at high risk for mortality. Auxiliary
178 nurses began to visit homes with an infant younger than 6 months of age every month, and

179 homes with an infant 6-11 months of age received a visit every three months. Homes with older
180 children were visited every 6 months. One additional modification of the home visitation
181 program that emerged was to visit mothers who worked selling goods in the local market and
182 their children while they were in the market, since these women were rarely at home.

183 The program gradually introduced Community Health Volunteers (CHVs) to take over
184 the work of household visitation. Their responsibilities included, among other things, health
185 education, referral to the clinic of those who were ill and those who were pregnant, and follow-
186 up home visits to patients who had been seen in the clinic.

187 Beginning in 1992, the CHVs received a small salary and their name was changed to
188 V*igilante* (literally, one who is vigilant). CHVs also received free medical care from the clinic as
189 well as a 50% discount on medicines and laboratory tests. CHVs were supervised by an auxiliary
190 nurse employed at the health clinic who was also in charge of the work in the community. In
191 this way, the CHVs and the auxiliary nurse served as unbroken links between the community
192 and the CSRA/Montero Program's clinic.

193 Auxiliary nurses immunized and weighed children and also provided them with vitamin
194 A capsules and ferrous sulfate (for the prevention and treatment of iron deficiency anemia).
195 Sick patients seen in the clinic were visited at home for follow-up. Homes that had one of the
196 following received more frequent home visits as needed: a pregnant woman, a newborn, a
197 malnourished child, a child with diarrhea or a respiratory infection, and someone with
198 symptoms of tuberculosis or who was being treated for tuberculosis. Homes with residents who
199 had just moved into the neighborhood also received more frequent visits.

The CSRA/Montero Program maintained a health folder for each family that had a number corresponding to the number of their house on the map developed by the program in collaboration with the community. This number was also placed on the front of the house. The staff carried these family folders with them when they visited homes.

Expansion of the program to the Cruz Roja District and District 2

In 1996, at the request of the local Red Cross (*Cruz Roja* in Spanish) chapter and community leaders, the CSRA/Montero Program implemented services in the municipal health district of Montero served by this local Red Cross chapter, which had already established a small clinic there. This health district had a population of 13,000 in 2010.

In 2002, a British organization, *Comunidad de Libertad y Esperanza de la Mujer* – CLEM (literally, Community of Liberty and Hope for Women), requested the CSRA/Montero Program to expand its activities to an additional health district of Montero, called *Distrito* 2. In 2010, *Distrito* 2 had a population of 7,000. At present, the CSRA/Montero Program continues to serve the Villa Cochabamba and *Cruz Roja* health districts with the same essential program. The municipal government took over management of District 2 in 2014. Villa Cochabamba and *Cruz Roja* now have a population of 19,016 and 20,522, respectively, for a combined population of 39,538 people.

In 2010, the Villa Cochabamba District added five neighborhoods and the population grew three-fold, to 19,000. In 2019, Villa Cochabamba still had a population of 19,000 because

one neighborhood had been assigned to an adjacent district. The number of auxiliary nurses working in the program grew from 1 in 1998 to 8 in 2010.

Further development of comprehensive primary health care services

In 1989, the CSRA/Montero Program started to offer general medical consultations provided by physicians and added other services in accordance with the priorities set by the Ministry of Health. At present, the program provides a comprehensive set of services for newborns, children, pregnant women, and adults. Table 1 provides a detailed list of the services that were provided in 2010, and Table 2 presents the staffing of the program as it existed at that same time. With 18 trained health workers (4 auxiliary nurses, 5 graduate nurses and 9 physicians) for 39,000 in 2010 (0.46 trained staff per 1,000 population), the CSRA/Montero Program has only one-tenth of the minimum density of 4.45 doctors, nurses and midwives per 1,000 population estimated by the World Health Organization to be required for achieving the health-related Sustainable Development Goals [27].

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Tables 1 and 2 about here

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The diabetes program

Beginning in 2009, the CSRA/Montero Program received funding to support a program for diabetes patients with no health insurance and with no means to pay for their care. The program provided training for health workers in diabetes detection and clinical treatment based on international standards and protocols. The staff now gives monthly educational sessions for diabetic patients on healthy behaviors and prevention of complications. Applying CBIO principles, every patient receives a specific individual and family health plan, including medication and dates for medical checkups and laboratory tests. The health staff provides education about prevention and early detection of diabetes at the time of home visits to families who have a member with diabetes and to other vulnerable families. The program also includes educational sessions to schoolteachers, students and parents regarding diabetes prevention and promotion of healthy behaviors. The health staff also raises awareness about diabetes to the general public through various communications media such as health fairs, radio, TV, banners and brochures.

The tuberculosis program

The CSRA/Montero Program began its tuberculosis program in Villa Cochabamba in 1988. It was the first program in the country to implement the DOTS strategy (Directly Observed Treatment – Short Course) recommended by the World Health Organization. The programs regular contact with all households facilitated case detection and supervision of treatment.

Medical care for children with long-term special needs

Starting in 2005, the CSRA/Montero Program received funding from the Rosa Vera Foundation to provide medical and social support for children and adolescents with disabilities. The fund paid for medical checkups, laboratory tests, and acquisition of equipment. Since 2014, the CSRA/Montero Program has managed a facility owned by the Foundation that provides speech therapy, physical therapy and related services.

Training of adolescents for peer education

From 2007 to 2009, the CSRA/Montero Program trained 200 students as trainers for their peers in sex education. Topics included sexuality, adolescent pregnancy and family planning, detection and prevention of HIV/AIDS and sexually transmitted infections, self-esteem, gender equity, and communication. These trainers reached 15,000 peers with this training. Now 18 health staff from the CSRA/Montero Program provide this education instead of teen educators, alongside teachers in the schools and the staff of another local NGO that specializes in reproductive and sexual health.

Visiting medical specialists

Medical specialists from the United States began to visit the Montero municipal hospital in the 1960s through connections of Methodist missionaries living in Montero. As Andean Rural Health Care began its involvement in Montero in 1988, it supported the continuation of these visits. While some visiting specialists worked at the municipal hospital in Montero, others

281 worked with the CSRA/Montero Program. The specialists included ophthalmologists and
282 opticians, dentists, pediatricians, and internists. Patients traveled long distances to Montero to
283 obtain eye consultations and eye surgery at a reduced cost or for free, and visiting
284 ophthalmologists and opticians provided training to local providers. From 2006 to 2011, the
285 CSRA/Montero Program provided free visual screening for all students in Montero until the
286 municipal government took over the program.
287
288 **The health information system**
289 As mentioned previously, the CSRA/Montero Program has maintained from the outset a health
290 information system that is based on a health folder for each family. The health folder has an
291 identification number that is the same as the household number in the census and on the map,
292 also identifying the name of the district and neighborhood. Information from clinic visits and
293 home visits are contained in the folder, including births and deaths, immunizations, and
294 nutritional monitoring data. In 2006, the CSRA/Montero Program began to digitize the
295 information in these family folders using its locally developed software system.
296
297 **Community engagement**
298 On a monthly basis, the CSRA/Montero Program holds two types of meetings with
299 neighborhood leaders to review current activities and to plan new activities. One type of
300 meeting is that of the *Comites de Analisis de la Información* (Information Analysis Committees),
301 comprised of sub-mayors, local neighborhood authorities and local health authorities, to

analyze the current findings from the health information system. Specific plans are developed to address the problems detected. A separate meeting is held monthly with the neighborhood's Local Health Authority to specifically review deaths that occurred since the previous meeting and to discuss how similar deaths might be avoided in the future. At an annual end-of-the year meeting, the year's activities are evaluated, changes in health indicators are reviewed, and plans are made for the following year based on health indicators and community-expressed needs.

Sources of PHC program funding

The program was funded initially by Andean Rural Health Care, the Ministry of Health, and the city government. Beginning in 1997, the national government started a health insurance program for pregnant women and children who did not have their own health insurance. In 2002, this program, *Seguro Universal Materno Infantil* (Universal Maternal and Infant Insurance, or SUMI), paid for prenatal care, delivery care, care for women during the 6 months following a birth, and care for all children younger than 5 years of age. These services were provided free of charge to mothers and their children. The CSRA/Montero Program began to participate in SUMI in 2005.

In 2009, the Bolivian government initiated the Juana Azurduy Bonus program as part of SUMI, which grants conditional cash transfers to all pregnant women and children younger than 2 years of age who do not have health insurance. These "mother-child bonuses" are paid as follows:

- 50 Bolivian Bolivianos (US$7) for completion of four prenatal visits
- 120 Bolivian Bolivianos (US$17) for giving birth in a facility and obtaining a postnatal visit
- 125 Bolivian Bolivianos (US$18) every 2 months for well-child visits (including immunizations) during the first 2 years of life

In 2013, SUMI was expanded to include the Comprehensive Health Services Provision Program, which extended payment for health care services to all women of reproductive age, to women and men 60 years of age and older, and to persons with disabilities.

Beginning in 2000, the national Ministry of Health provided salaries for three support staff of the CSRA/Montero Program: a graduate nurse, an auxiliary nurse, and a health information specialist. In 2005, the municipal government of Montero began to pay for some salaries. At that point, government support (both national and local) provided for about one-half of the CSRA/Montero Program's budget.

As shown in Figure 2, 92% of the program's current funding is derived from the municipal, departmental and national governments. These funds support staff salaries and supplies. The remaining 8% comes from fees for services and private donations. To obtain the needed political support from the community leaders and the government that was required to obtain the needed government financing, the CSRA staff invested considerable time educating them on the importance of the program. The current recurring cost of the entire

CSRA/Montero Program is US$11 per person per year (as determined by salary costs along with costs of supplies, medicines and equipment). At present, the CSRA/Montero Program is serving nearly 40,000 people, comprising almost 30% of the city's population.

Discussion

For three decades the peri-urban CSRA/Montero Comprehensive Primary Health Care Program in Bolivia has faithfully implemented principles of the census-based, impact-oriented (CBIO) approach and has established a model comprehensive PHC program for a population of nearly 40,000 people. The foundation of the program is a census, mapping of all households, and routine visits to all homes. The program has been able to maintain close contact with the community and achieve strong community engagement in addressing priority health problems.

The features of the CBIO approach that are well-developed in the CSRA/Montero Program are:

(1) Maintenance of an annually updated census, a map with enumeration of all households, and creation of family health folders having the same number as the number of the house on the map and in the census;

(2) Responsiveness to both the community's expressed health priorities as well as to the local epidemiological priorities (the most frequent, serious, readily preventable or treatable conditions in the program area, based on locally acquired data), which have changed over time;

(3) Engagement with the community, with the community taking responsibility for its health and actively participating in reviewing current health data and in planning, implementing and evaluating the program;

(4) Routine systematic home visitation, thereby enabling ongoing connection between all households and the program, assurance of equitable coverage of basic services, and ongoing prospective vital events registration; and,

(5) Measurement of health status (mortality and coverage of key evidence-based interventions).

In 1993, the CBIO approach underwent an external review by an international expert panel convened by the Child Survival and Health Grants Program of the United States Agency for International Development [28]. The review covered the three programs of Andean Rural Health Care (now Curamericas Global) that were underway at that time: on the northern Altiplano, in the Cochabamba Valley, and in Montero. The Expert Panel's report concluded that the CBIO approach merited replication, rigorous evaluation and further development.

Curamericas Global implemented the CBIO approach in its child survival project in Nimba Country in rural Liberia [29], in the isolated rural highlands of Huehuetenango, Guatemala [30], and now in western Kenya in the sub-counties of Kitutu Chache South and Kitutu Chache North in the county of Kissi in western Kenya. Elements of the CBIO approach, particularly the frequent visits to all households, are embodied in the Care Group approach, now being implemented by Curamericas Global in all of its programs as well as by other organizations around the world [31, 32].

At a cost of US$11 per person per year, the CSRA/Montero Program is highly affordable. Bolivia is now a lower middle-income country with a total per capita expenditure at $427 per year [33], and the projected growth in per capita spending for health among lower middle-income countries is 4.0% per year [34]. The costs of implementing a PHC program such as that implemented by CSRA in Montero are certainly affordable.

Conclusion

This 30-year history of the *Consejo de Salud Rural Andino/*Montero Comprehensive Primary Health Care Program in Bolivia provides an example of how community collaboration and community-based service delivery can complement the traditional model of primary health care services provided in facilities. The census-based, impact-oriented approach, as implemented in Montero, is feasible with the proper professional leadership. A following paper in this two-paper series [6] provides evidence of the program effectiveness. The CBIO approach as implemented in Montero, Bolivia, merits replication with rigorous evaluation, and further development. It is a valuable strategy for strengthening PHC services in Bolivia and beyond and can be a valuable asset in the global quest to achieve Universal Health Coverage through PHC.

Declarations

List of abbreviations

CBIO: census-based, impact-oriented

CSRA: *Consejo de Salud Rural Andino* (Andean Rural Health Care);

TB: tuberculosis; USAID: United States Agency for International Development

Ethics approval and consent to participate

The Emory University Institutional Review Board (IRB) determined that the results were not generalizable as defined by the Emory IRB, and that IRB approval was not required. All those interviewed gave informed verbal consent. No information about those interviewed was obtained – only information about the program itself.

Consent for publication

Not applicable

Competing interests

The authors declare that they have no competing interests.

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431

432 **Authors' contributions**

433 HM and HP wrote the first draft of this article. DC has provided the leadership and ongoing
434 support for the CSRA/Montero Program for the past three decades. MC has provided program
435 support for three decades. NR and RL have provided long-term support to CSRA and its
436 programs in Bolivia. All authors participated in the development of this paper and approved the
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438

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Authors' information

DC has served as the Director of the CSRA/Montero Program since 1987. MCC has been a member of the staff of CSRA/Montero Program since 1991. HM is currently a member of the Advisory Board of Curamericas Global. NCR served as Country Director for CSRA from 1986 to 2013 and currently serves on the Board of Directors of CSRA and Curamericas Global. RL has worked with CSRA since 1997, and since 2013 he has been Country Director of CSRA. HBP founded Curamericas Global (originally Andean Rural Health Care) in 1983 and serves on its Board of Directors. In addition, he is a Senior Scientist in the Health Systems Program of the Department of International Health, Johns Hopkins Bloomberg School of Public Health.

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Figure 1. Location of Montero in Bolivia, South America

Source: https://commons.wikimedia.org/w/index.php?curid=22864132

Note: Montero is just north of Santa Cruz de la Sierra; Carabuco is just northwest of La Paz; Mallco Rancho is just South of Cochabamba

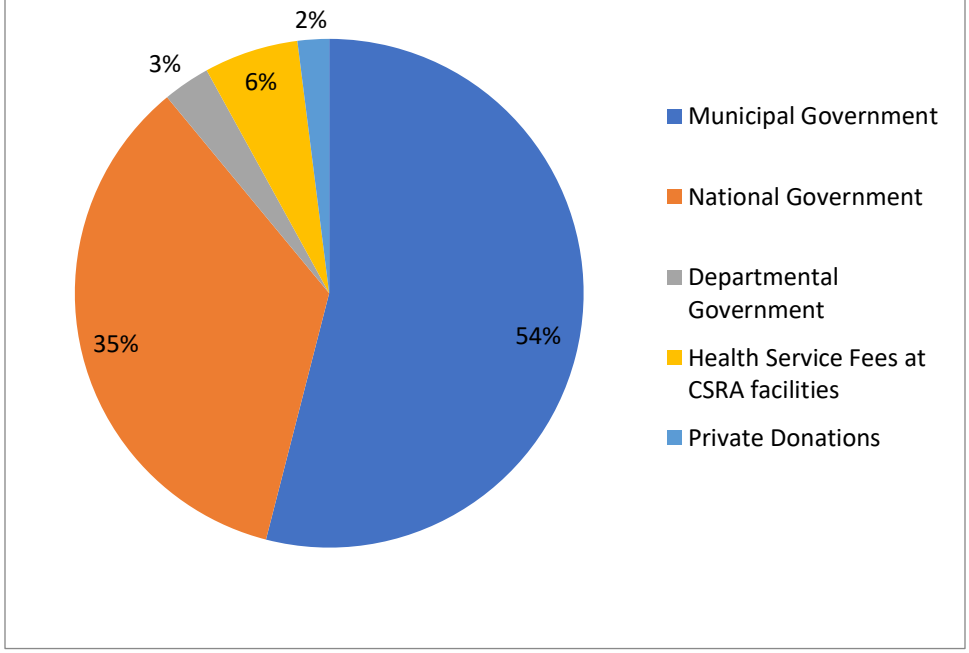

Figure 2. Sources of funding for the *Consejo de Salud Rural Andino*/Montero Program, 2019

Table 1. Primary health care services provided by the *Consejo de Salud Rural Andino*/Montero Primary Health Care Program, 2010

Health services for children
Standard newborn care exam
Screening for hypothyroidism
Screening for Chagas disease and care for children with congenital Chagas disease
Routine monitoring of growth and development
Administration of complementary foods (*Nutribebe*) to children 6-23 months of age
Standard childhood immunizations
Administration of vitamin A, iron supplementation, and anti-parasitic medication
Inscription in conditional cash transfer program
Maternal and newborn care
Prenatal care (including tetanus toxoid immunization, screening for HIV, diabetes and hypertension, Chagas disease, and more frequent follow-up of women at high risk, and inscription in the conditional cash transfer program – *Bono Juana Azurduy*)
Delivery care and referral of patients with obstetrical complications
Postpartum care and care of the newborn (including administration of BCG immunization, screening for hypothyroidism, and preparation of formal birth certificate)
Follow up of newborns at high risk
Adult care (non-maternity)
General routine medical care
Screening and treatment for diabetes and hypertension
Screening and treatment for HIV infection and tuberculosis
Treatment of dengue, Chikungunya, Zika and influenza infections
Screening for cervical and breast cancer
Treatment of dog bites and administration of rabies vaccination program for dogs

Table 2. Staffing of the *Consejo de Salud Rural Andino*/Montero Primary Health Care Program, 2010

Type	Villa Cochabamba	*Cruz Roja*	District No. 2	Total (full-time equivalents)
Community Health Volunteer/*Vigilante*	8 FT	7 FT	3 FT	18 FTEs
Auxiliary nurse	1 FT	1 FT	2 FT	4 FTEs
Graduate nurse	2 FT	2 FT	1 FT	5 FTEs
Physician	3 FT	5 FT	1 FT	9 FTEs
Dentist	0	2 HT	0	1 FTE
Ophthalmologist	2 FT	0	0	2 FTEs
Laboratory technician	1 FT	1 FT	1 FT	3 FTEs
Pharmacy professional/ cashier	2 FT	1 FT	1 FT	4 FTEs
Administrator	1 FT	1 FT	1 FT	3 FTEs
Accountant	1 FT	1 HT	1 HT	2 FTEs
Systems engineer	1 FT	0	0	1 FTE
Cleaning person	1 FT	1 FT	1 FT	3 FTEs
Watchman	1 FT	1 FT	1 FT	3 FTEs
Total (full-time equivalents)	24 FTEs	21.5 FTEs	12.5 FTEs	58 FTEs

FT: full time; HT: half time