Report on the Smiles Forever Foundation: A Dental Hygiene Education & Service Model for Latin America

Running Title: Report on the Smiles Forever Foundation

Sandra Kemper, RDH, BS

Author's affiliation:

Founder and Director of the Smiles Forever Foundation Cochabamba, Bolivia Website: www.smilesforever.org

Correspondence to:

Sandy Kemper

E mail: sandykemper@smilesforever.org

Phone: (vonage) 206-407-3855

United States of America --P.O. Box 217 Renton, Washington 98057

Bolivia (majority of the year) --Pasaje Saul Mendoza No. 20 Cochabamba, Bolivia

An application for the 2015 Sunstar Foundation World Dental Hygienist Award (Project/Activity category); this report has not been previously published.

MeSH Key Words: dental hygienists, Latin America, Bolivia, oral health, health manpower, dental health services, indigenous population, social welfare, health services accessibility

ABSTRACT

Objectives – Smiles Forever is a non-profit foundation in Bolivia, designed and developed to address training program and workforce shortages related to oral health in Bolivia. Is it registered in the USA and Bolivia as a 501(c)3. The overall objective of Smiles Forever is to improve the oral health of low-income Bolivians through training low-income women to become dental hygienists.

Methods - Seeing the plight of impoverished, young, indigenous women and the lack of oral disease prevention in the population firsthand, Smiles Forever founder and director, Sandy Kemper, created a two-year accredited dental hygiene vocational training program to 1) train women to become dental hygienists and then 2) to provide access to care for underserved populations through two clinics in Cochabamba, Bolivia.

Results – The Smiles Forever Foundation is the only dental hygiene education and training program in Bolivia. The program has provided education, an employable skillset, and a career to 37 poor, indigenous women. These women have, in turn, contributed to improving the oral health status of more than 20,000 impoverished children and young adults in the Cochabamba region of Bolivia. The Smiles Forever model has the potential to be integrated into the national educational system and thus be scaled up to increase its influence on the national oral health status.

Conclusions – The Smiles Forever Foundation serves as a model by which neighboring Latin American countries may replicate the program for training low-income women to become dental hygienists and serve disadvantaged youth who would otherwise live without access to oral health care.

INTRODUCTION

Bolivia is classified as a lower middle-income country with a population of nearly 11 million people. The country is land-locked and located in the center of South America, in the Latin American and Caribbean (LAC) world region. An estimated 45% of the population lives below the poverty level and at least 13% of the population lives on less than \$3.10 USD per day. (1) Bolivia also has an under-5 years of age mortality rate significantly higher than the average across the LAC region, and a life expectancy of 67 years, nearly-eight fewer years than the average life expectancy across the LAC region. (1)

Bolivia is a unique country in the LAC region because 62% of the population identifies as indigenous and 72% of the total population speaks an indigenous language, including Bolivia's current president who has been in office since 2006. The government recognizes 36 official indigenous nations and their respective languages. (2) However, an estimated 74% of the indigenous population lives in poverty, especially those who live in rural areas (86%). (3) Large inequalities in employment, wages, education, child labor and health exist between indigenous and non-indigenous Bolivians. (3)

Education and development of a career are a rare opportunity for Bolivians, particularly for indigenous women. More boys than girls are enrolled in primary and secondary school. While the average male child from the wealthiest quintile and an urban area has approximately 14-15 years of formal education, an indigenous girl from the poorest quintile and a rural area has approximately two years of formal education. (4) Only 36.7% of wage employees in the non-agricultural sector (industry or service) in Bolivia are women. (1) Women are also frequently victims of violence. An estimated 38 percent of married women are victims of physical, sexual and/or psychological violence in their own homes. (4) When a woman is educated and contributing financially to the household, she is less likely to accept domestic violence. Bolivia's adolescent fertility rate is higher than the average across the LAC region and nearly 18% of teenage women aged 15-19 years already have children or are currently pregnant. The average number of births per woman in Bolivia is also higher than the LAC region on average. (1)

A high burden of illness also disproportionately affects poor and indigenous Bolivians, including debilitating oral health status. Limited data suggests that 87% of 12-year-olds in Bolivia are affected by dental caries. Nationwide, the average 12-year-old has nearly five decayed, missing or filled teeth, most of which are decayed and untreated. For the poor and indigenous, this estimate is expected to be significantly higher. (5) Furthermore, only 12.6% of the Bolivian population is estimated has access to preventive oral health programs, including fluoridation and sealants. (4)

The Bolivian government has provided a public health and dental insurance plan for the people of Bolivia since 2003. Dental benefits to children under five years of age include simple fillings, extractions, fluoride treatments, endodontic treatment, and oral surgery. (6) To access these benefits, an individual must be registered with the government, a multi-step process including acquiring a birth certificate, completing vaccinations and undergoing a medical exam by a registered physician. These requirements create a barrier to care for many, especially low-income and rural children. Less than 20% of the population is covered by any insurance. (6) Unregistered individuals may access care at a reduced cost in public facilities (such as hospitals), but are required to pay at the time of the appointment.

Additional systemic barriers to care were described in conversation with a Bolivian dentist (Aponte, Claudia 2015 Dec. 04). First, there is a lack of clinic funding and staff, particularly in rural areas. A majority of the dentists choose to live in the city due to a higher salary, resulting in neglect of rural populations. It is very costly in Bolivia for dentists to set up and run a dental practice. Many of the costs include rental of clinical space, buying or renting a chair, and obtaining licensure. As a result, many dentists are not registered. A large majority of the dentists end up working as assistants to other dentists in large clinics. The more advanced degrees one has in dentistry, the better chance they have to earn a larger salary from their own practice or reputable clinic. However, graduate degrees in dentistry

are not available in Bolivia, so many students leave to train in Mexico or Brazil. Some dentists are able to practice five to-ten years after graduation, but some are never be able to practice.

Preventive care is infrequently available or offered, perhaps in part due to the lack of emphasis on dental hygiene in dental curriculums. The law does not allocate money for tooth brushing instruction or the application of fluoride in public schools. (6) The Bolivian government has acknowledged the value of vocational training for targeting oral and systemic diseases (but dentists are trained to work alone. (6) There are currently not enough dentists throughout the country to provide care to the whole Bolivian population. (5)

Since the early 20th century, auxiliary dental personnel, including dental hygienists, have been trained to bolster the dental workforce and expand services at an affordable cost, thus creating access to dental care for more people. They work to prevent oral disease through educating the population about oral health and providing basic preventive services in the clinic. (7) The International Federation of Dental Hygienists (IFDH) currently has 28 member nations, but none from Latin America. Currently The Dental Hygiene Society of Cochabamba is in the process of application to the International Federation of Dental Hygienists (IFDH) and, if and when accepted will be the first dental hygienists' society to represent Latin America. However, a few countries in Latin America that are not included in the IFDH include auxiliary dental personnel in their oral health workforce. These countries include Brazil, Chile, Venezuela and Bolivia. Brazil has a long-standing (since the 1950s) oral health component in their governmental public health programs that includes training and employment of oral hygiene therapists (7). Internet searches suggest that Chile and Venezuela each seem to offer a short-term technical program at the university to train dental hygienists, but little has been published about the programs and anecdotal evidence suggests these graduates end up employed as dental assistants in the clinic after graduation. This report on the Smiles Forever Foundation in Bolivia may serve as a comprehensive training model that can be replicated for bolstering the dental workforce in Latin America.

Statement of Purpose

Smiles Forever is a non-profit foundation in the United States and Bolivia. Smiles Forever was designed and developed to address training programs and workforce shortages related to oral health in Bolivia. The organization is an accredited teaching organization in Bolivia, authorized to educate and train dental hygienists to provide preventive oral health care services and education to local communities.

Objective

The overall objective of Smiles Forever is to improve the oral health of Bolivians living in poverty through education and training of young, indigenous women to become dental hygienists. To accomplish this, Smiles Forever targets two particular objectives:

- 1. Education and training of low-income, indigenous women;
- 2. Service to low-income populations by providing oral health care and education.

METHODS

The Backstory

Smiles Forever was founded and is currently directed by Sandy Kemper. Prior to starting Smiles Forever, Sandy worked as a dental hygienist in a traditional clinical setting in the United States (U.S.) for about 20 years before deciding to participate in community service work in South America. She embarked on her first trip in 1999, to Cochabamba, Bolivia. The trip was a humanitarian dental trip, accompanied by other dentists and hygienists from the U.S.

The team worked at a homeless shelter, called *Madre de Dios*. The shelter's purpose was to provide a home for female children, aged 5 to 18 years of age, as well as to serve as a daycare center for low-income families. The shelter had a revolving door. Most young women came to live at the shelter because they were abandoned or taken from their families by the government because of neglect or abuse. It was not uncommon for a young mother to have a child by her father or close family member. These women had very little education and only a few had finished high school. Many who grew up in the shelter returned to live as a single mother with their own children and without a job. At that time few technical opportunities were available for these young women as most were delegated to work as maids or sell products on the street. The governmental shelter system provided vocational training for the boys such as plumbing, electrical and -- in some cases – even helped the boys through the university to become dentists and doctors. Sandy was shocked to learn this same support was not offered to girls.

The shelter also housed a dental clinic and provided dental care to neighboring shelters and walk-in patients, but the clinic was in shambles. There was no suction and the one chair barely functioned. *Madre de Dios* had a Bolivian dentist on staff. In that era, the dentist did numerous extractions and some fillings, but never crowns or endodontic treatments. In Sandy's memory, it seemed that everybody who came through the clinic was missing his or her first permanent molars. There was little or no preventive activities in place at this point for the population the clinic served. Follow-up and subsequent appointments to provide treatment were also challenging, because many of the patients came from outside the city. They had little possibility of returning for treatment, and some the children who lived at the shelter were frequently transferred to other shelters.

During this trip, Sandy and the team treated patients on a board balanced between two chairs. Sandy remembers that many of the children had rampant caries and they had the heaviest calculus she had ever seen. She was able to do a few debridements, but mostly gave tooth-brushing instructions. Her visiting team included an oral surgeon who performed many of the extractions with a flashlight in the corner of the clinic. By the end of the trip, parents were coming from miles around begging for their children to be seen by the team. The team cared for as many children and parents as was possible.

Sandy returned to the U.S. but her concern prompted her to return alone for ten more days the same year to provide care while living in the shelter. She wanted to know more about the people *Madre de Dios* served and what it was like to live in the shelter. Following this second trip to Cochabamba, and over the course of the next year, Sandy garnered support from friends, family, fellow dental hygienists and obtained \$10,000 USD from her line of credit and returned the following year (in 2000) to refurbish the clinic. She bought a used dental chair, repaired equipment, sprayed for the infestation of roaches, repaired broken windows, and de-liced the shelter, including the students. Next, Sandy aimed to educate and train five young women from *Madre de Dios* to become dental hygienists to provide them a skill set and career by which they may teach oral health prevention to local communities. Ushering the first students through the training program was a whole-hearted endeavor and struggle for everyone involved. Three years later, these first five students graduated from the Smiles Forever dental hygiene school.

Programs & Activities

The Smiles Forever Foundation was formally established as a 501 (C) 3 non-profit organization in the U.S. this same year the program commenced, in June 2000. Since then, many changes have occurred in Smiles Forever. *Madre de Dios* eventually closed its doors, prompting Smiles Forever to evolve on its own. Smiles Forever became a registered, non-profit organization in Bolivia in 2003. Today, 15 years later, Smiles Forever is an accredited dental hygiene school in Cochabamba, the only one of its kind in Bolivia. Additionally, Smiles Forever operates two of its own dental clinics: a community service clinic and a fee-for-service clinic open to the general public. The community service clinic patients are

disadvantaged children who come from 17 different partner organizations in the Cochabamba area and are provided free dental services. The second clinic is open to the general paying public in Cochabamba and all proceeds go toward helping to finance the dental hygiene school and community service clinic.

Target populations - Smiles Forever offers training and education for low-income, indigenous women in Bolivia to become dental hygienists. Most of these young women grew up in shelters or came from poor economic backgrounds. Smiles Forever also provides dental services free of charge to disadvantaged populations in the Cochabamba area.

Dental Hygiene School

Curriculum -- Under the guidance of dental hygiene faculty from the U.S., Bolivian dentists, and visiting dental hygienists, Smiles Forever developed appropriate lesson plans for the dental hygiene school. Since all of the students are economically disadvantaged, they must work part-time to earn an income while attending the dental hygiene school, so the curriculum was designed to be a hands-on, half-day training program.

Students are required to have completed high school in order to be eligible for the program. An IQ test and physiological evaluation by our physiologist is performed to assess each student's and Smiles Forever staffs' potential to guarantee this student success in completing the program. To hold students accountable and to test their commitment to the program, an entrance fee of \$200 and a monthly payment of \$7.50 is required. Students sign a contract to commit to study only dental hygiene while they are in the program, not to become pregnant, and to work as a dental hygienist for at least two years after completing the program. Very rarely is a student turned away if they demonstrate commitment and desire. Smiles Forever stresses the values of honesty, confronting issues directly with the person involved, and the importance of being on time.

The training program includes lecture, hands-on training and time in practice. Lectures are given one day per week and the rest of the time is spent in the community service clinic, learning under the guidance of Smiles Forever's dental professionals. The lessons begin with the basics: professional dress; self-assessment; leadership; sterilization techniques; and assisting skills for the dentist. This training is crucial because they may be the only auxiliary personnel in the office. Typically, the students' high school education is below standard, so staff must spend a lot of extra time teaching written skills, grammar, and the use of computers. Students must pass the lecture series (1,648 hours) at 75% (which includes reinforcement tests). This is more rigorous than public education standards in Bolivia, which allows a student to pass at only 51%. Students must complete 50 prophylaxis' treatments in the Smiles Forever clinics where their patients were initially residents and children from the Madre de Dios shelter and daycare, and now include disadvantaged children from 17 local organizations. Additional program requirements include a one-month externship with a dentist in Cochabamba and 60 hours of community service learning, described below. After completing all the requirements of the Smiles Forever dental hygiene program, students must pass a final written examination at 75%. Students must also develop a treatment plan on a Class III patient and complete one designated quadrant. Students must be prepared to demonstrate clinical techniques and devise a post treatment plan. The curriculum is routinely revised and updated to U.S. standards through professional suggestion and Smiles Forever's assessment.

Service Learning – Smiles Forever students also gain experience treating children and offering oral health education in a community setting as part of their required training. Students are required to complete 60 hours of community services in educating the public about oral health and hygiene. One example of how students meet this requirement is as follows. In 2011, the Smiles Forever Foundation partnered

with the Dental Hygiene Program at Shoreline Community College in Seattle, Washington. Together, they created a study abroad program for students from the U.S. and students from Smiles Forever to work side-by-side to provide dental services and emergency care to over 350 schoolchildren in a rural community outside of Cochabamba, Morochata. The students also taught tooth-brushing skills, offered oral hygiene education and nutritional advice to the children, their parents and teachers. In January 2013, Shoreline Community College and Smiles Forever's study abroad program was one of ten educational institutions in the U.S. to be awarded the Andrew Heiskell Award for Innovation in International Education. The study abroad program with Shoreline Community College was replicated in 2015. The two institutes are in the process of developing this program to occur on an annual basis.

Dental Clinics

Community Service Clinic -- Smiles Forever's Community Service Clinic offers free, complete dental services to several organizations that support disadvantaged children in Cochabamba and the surrounding rural area. Besides providing preventative services (prophylaxes, fluoride treatments, and applying sealants), students educate their patients about oral health and hygiene. The Bolivian dentists on staff provide the restorative care and educate the students in the process. The clinic has 4 Bolivian dentists/professors on staff.

Currently, Smiles Forever works with 17 different shelters, foundations, and non-profit organizations, and basically any person in need. These include children struggling with cancer, children affected by HIV, children living with their parents in jail, and children recovering from severe burns. Smiles Forever students provide toothbrushes with instruction to the organizations' care staff, and a nutritional lecture kit with materials for them. As part of the training the staff is trained to provide a special time and place to brush and return every six months for cleanings and exams. Some of the organizations have a small budget to help provide the dental services and/or supplies.

Fee-for-Service Clinic -- In 2009, Smiles Forever opened a second, full service clinic providing restorative care, implants, oral surgery and orthodontics. This clinic is open to the general public and offers these services at a moderate price. This fee-for-service clinic serves two main purposes: 1) to develop the hygiene students' social and clinical skills; and 2) to leverage financing of the community service clinic.

As poor, indigenous women who are subordinate in their society, Smiles Forever staff noted that the dental hygiene students often entered the program lacking basic skills for interacting with the general public. The fee-for-service clinic creates an opportunity for them to hone their social and interpersonal skills and build their confidence in interacting with patients from outside of the shelter system who may be more demanding. This clinic also enables the students to develop skills such as answering the phone and confirming appointments as well as to be exposed to more advanced clinical procedures. All of the money that is earned in the fee-for-service clinic goes toward supporting the finances of the community service clinic.

RESULTS

Dental Hygiene School

Since the Smiles Forever dental hygiene training program began in 2000, 37 impoverished, young indigenous women have graduated as dental hygienists from the program and an additional six currently enrolled students anticipate graduating within the next two years. Each of the graduates has a unique success story. Ten are currently working in Cochabamba as dental hygienists. Four graduates have continued their education by entering the public university in Cochabamba to become dentists. Three

graduates have moved to Argentina where they are working in the dental field there. And still others, have worked as hygienists for some time, but are now at home raising families.

One very successful graduate, who has lead a life full of challenges, has been a lead instructor at the Smiles Forever dental hygiene school for nine years now, Jovana Medina. This young, 33 year-old, single mother was raised by an alcoholic mother and only met her father for the first time a few days before he passed away. She lived in the streets and under a bridge in Cochabamba until the authorities moved her to the *Madre de Dios* shelter at the age of 13 years of age. After high school, she enrolled in the Smiles Forever dental hygiene school. She created the first Dental Hygiene Society in Cochabamba in 2013 that has ten members. The society raises money amongst themselves and provides tooth brushing and sealant programs in rural areas. She has truly utilized every opportunity she has been given to create a life for herself and her family. Another such story is that of Nayda Apata. This dental hygiene graduate is currently working for Smiles Forever as the lead dental hygiene Instructor and as a restorative dentist in the Smiles Forever community service clinic. She is also completing her Master of Education degree as she has developed an intense love for teaching her students.

In March 2015, Smiles Forever secured a Vocational Training Team Grant through the Rotary Club of Tacoma #8. This award enabled-two dentists and four dental hygienists from the U.S. to visit Smiles Forever in Bolivia to provide continuing education to and evaluation of our staff as well as local Bolivian dentists and dental students. The visiting clinicians gave "dental hygienists"-themed lectures at Cochabamba's private university and local clinics to support the role of auxiliary dental personnel, such as a dental hygienist, in the dental workforce in Bolivia. They also offered education on special oral health topics such as HPV and importance of the oral exam. Their visit was well received and was highly publicized in the newspaper and dental community.

Community Service Clinic

Between 2000 and 2015, more than 20,000 patients have been served at the Smiles Forever community service clinic. In 2015 alone, an estimated 1,200 children will have received full oral health care that other wise would not be treated. Patients receive preventative care including prophylaxes, sealants, fluoride treatments, oral hygiene and nutritional education by the dental hygiene students and complete restorative care by the Bolivian dentists on staff. Today, 3,257 patient charts are on file at the Smiles Forever community service clinic. The majority of the community service clinic patients come from the 17 non-profit organizations in the Cochabamba region that partner with Smiles Forever. Below is a description of how Smiles Forever's partnership with one such partner organization, *Hogar Wasinchay*, has improved the oral health of this shelter's residents, young girls who have been abandoned and/or abused.

The Story of Hogar Wasinchay —Smiles Forever has treated 27 patients from the Hogar Wasinchay over the course of two years. These patients were all female and were an average age of 11.0 years at the time of their first visit to the Smiles Forever community service clinic. At these patients' first visit, they had an average of 4.6 untreated caries or decayed teeth, 0.1 missing or extracted teeth, and 7.3 filled teeth. On average, only half of these young girls' teeth were classified as 'healthy' at their first visit to Smiles Forever's clinic.

All patients received preventive care during their first visit, mostly in the form of deep cleanings. Most (59%) of the patients were prescribed sealants, and 25% of those who were prescribed them received them during their first visit. More than two thirds (76%) of the patients were determined to need restorative treatment on their first visit, and treatment was initiated for all of them during this visit. The number of fillings needed per patient ranged from 2 to 15, with an average of 6 per patient. All patients received acidulated phosphate or neutral gel Fluoride application at this visit. All of these

patients also received a recommendation to return to the clinic for a follow-up appointment in 6 months. The primary reasons for these follow-up appointments were to continue preventive care and to complete extensive and advanced restorative treatment.

Almost all of these patients (81%) returned to Smiles Forever for the recommended treatment within the following year. The average time between their first visit and their follow-up appointment was 6-7 months. Most patients (63%) needed more than one follow-up appointments to complete treatment. However, at the time of the first follow-up appointment, notable improvements in these patients' oral health had been observed. Plaque levels were reduced approximately 19.6%, from average 44.9% to 24.5% plaque index, and most of the patients (63.6%) had no new decayed teeth.

DISCUSSION

Dental Hygiene School

Smiles Forever has faced many challenges in meeting the goal of educating women from disadvantaged backgrounds, approximately one third of who have grown up in the shelter system. Many have been abused sexually and emotionally by their significant other, and at least half of the students are single mothers. Education of women tends to be undervalued in Bolivian society, so many students study without the support of their family. Furthermore, the students often must go against their families' expectations of them to return to the family business, often selling products in the market. Smiles Forever has leaned heavily on the authority and education of the program director, a Bolivian attorney, Alejandro Beckrich to offer support to students regarding social benefits and their rights. All staff members are trained to offer emotional support to the students. Completion of the dental hygiene training program is a big challenge for most students, so the school must select the most highly qualified women to enter the program and to invest in.

Patient follow up in the community service clinic population is an ongoing challenge. The populations are not stable and so not all of the prescribed restorative services are able to be completed. This is the challenging reality of serving marginalized populations in which children often get bounced from one shelter to another or revolve in and out of their family's care and that of shelters. Despite the challenge of the task, Smiles Forever prioritizes working diligently with their partner organizations to assure prescribed treatment is completed and regular care is provided to all of these children on a semi-annual basis.

Sustainability and Smiles Forever in the Future

The financial sustainability of the Foundation is another ongoing challenge. Smiles Forever is costly to run (approximately \$100,000 per year) and receives neither governmental aid nor other public financial assistance. In an effort to leverage these costs, the fee-for-service clinic was opened which also provides a service to the community through the provision of moderately priced dental services. Nonetheless, Smiles Forever still depends on donations and grants for 98% of our budget.

Furthermore, dentists in Bolivia are not trained nor accustomed to working as a team with a dental hygienist. This creates a substantial challenge to the purpose and overall objective of Smiles Forever, which is to train dental hygienists to become part of the dental workforce in an effort to improve oral health in Bolivia. Although the school is accredited by the Bolivian government and the dental hygienist has been established in the national law for 23 years, graduates are not *licensed* to practice by the government. This has created a substantial barrier to employment for graduates.

However, dental hygiene graduates, with the help of Smiles Forever, have been successfully hired by dental clinics. Their duties vary by clinic. Some hygienists exclusively perform prophylaxes while others are limited in what they are permitted to do in the clinic as they do not have an official license.

Fortunately, through the Ministries of Education and Health, Smiles Forever has received authorization to administer a written and clinical examination to graduating students that will allow Smiles Forever graduates to be licensed by the Bolivian government to work as dental hygienists. The first such examinations will be offered in February 2016 and will be regulated by the Ministries.

Smiles Forever staff is currently working to develop the sustainability of the dental hygiene school. A plan was formulated alongside Bolivian dental professionals and societies. It includes transferring the Smiles Forever dental hygiene education program, with full credentials, to a local university that has a dental school already in place. A portion of the students would be on scholarship, fulfilling Smiles' continued commitment to providing an opportunity for low-income, indigenous women to be educated as dental hygienists, but such a transfer of the program would provide an opportunity for other students to enroll as well. As part of the curriculum at the dental school, dental hygiene students would take classes such as anatomy and oral pathology with dental students. Dental hygiene students would also assist the dental students in clinic and provide all the cleanings for their patients, generating a new generation of dental professionals who are accustomed to working as a team. Preliminary discussions regarding this transfer have been initiated and are underway with a private university in Cochabamba. The Smiles Forever Foundation would continue the community service project in Cochabamba or possibly incorporate the community service project as part of the curriculum at the university. These next steps will help ensure that Smiles Forever graduates will be able to serve in clinics to the best of their abilities and may thus strive to expand access to oral care to disadvantaged Bolivians who would otherwise not be able to afford it.

CONCLUSION

In conclusion, Sandy Kemper has created a two-year dental hygiene vocational training program that may serve as a model in other low-resource, Latin American countries. The Smiles Forever Foundation is the only dental hygiene training program in Bolivia. The program has provided an education, employable skillset and thus careers to 37 poor, indigenous women. They have, in turn, contributed to providing oral health care and preventive education to more than 20,000 impoverished children and young adults in the Cochabamba region of Bolivia. The Smiles Forever model has the potential to be integrated into the national educational system and thus be scaled up to increase its influence on the national oral health status. As such, Smiles Forever may serve as a model by which neighboring Latin American countries may replicate their program from training dental hygienists and serving disadvantaged youth who would otherwise live without access to oral health care.



RDH. Jovana Medina



Dr. Nayda Apata seated in the center, inauguration of academic year 2015

REFERENCES

- 1. The World Bank [website]. Washington, DC: The World Bank, 2015 [cited 2015 December 15]. Available from http://www.worldbank.org/
- The Pan American Health Organization [website]. Washington, DC: The Pan American Health Organization, 2012; Health in the Americas, country volume [cited 2015 December 15]. Available from
 - http://www.paho.org/saludenlasamericas/index.php?option=com_docman&task=doc_view&gi d=117&Itemid=)
- 3. The World Bank [website]. Washington, DC: The World Bank, 2004; Bolivia Highlights [cited 2015 December 15]. Available from http://go.worldbank.org/VKLQVXHAR0
- United Nations International Children's Emergency Fund (UNICEF) [website]. New York, NY, 2012; Bolivia, Country Programme Document [cited 2015 December 15]. Available from http://www.unicef.org/about/execboard/files/Bolivia-2013-2017-final_approved-English-14Sept2012.pdf
- Malmo University [website]. Malmo, Sweden: Malmo University [date unknown]; Oral Health Country/Area Profile Project, Bolivia [cited 2015 December 15]. Available from http://www.mah.se/CAPP/
- Ministerio de Salud [website]. Sucre, Bolivia: Gaceta Oficial del Estado Plurinacional de Bolivia, 2014 [cited 2015 December 15]. Available from http://www.minsalud.gob.bo/images/Documentacion/normativa/L475.pdf
- 7. Sanglard-Oliveira CA, Werneck MAF, Lucas SD, and Abreu MHNG. Exploring professionalization among Brazilian oral health technicians. Human Resources for Health. 2012; 10(5)