Addressing Dental Care Gaps in Rural Nicaragua

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IHSP
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Project Overview

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Organization: Change For Children
Location: Esteli, Nicaragua
Mentors: Dr. Véronique Benhamou, Dr. Gerard Melki, Dr. Robert Clark
Fellowship Duration: January 27th - February 13th, 2017

About the McBurney Fellowship Program

Through McGill's Institute for Health and Social Policy, the McBurney Fellowship Program supports students in international service programs related to health and social policy in Latin America. McBurney Fellows serve abroad in organizations working to meet the basic needs of local populations. One key aspect of this fellowship is its mandate to make a significant contribution to improving the health and social conditions of poor and marginalized populations through the delivery of concrete and measurable interventions. Students and their mentors identify issues, make connections with local organizations, and develop a strategy for the fellowship. The views expressed in this document are the opinions of the fellow, and do not necessarily reflect the opinions of the IHSP.

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Fellowship Overview

Objectives

Our main mission was to alleviate dental pain and prevent further decay for as many people as possible. The community we visited has very limited access to dental care, due to lack of institutional and financial resources. By setting up a temporary dental clinic in an area in need, we sought to reduce dental health care access obstacles and provide free dental care to those who otherwise cannot afford it. By providing different dental services, we aimed to reduce and eliminate infection and pain, repair and restore teeth that could be saved, and offer restorative treatments for longer term management. We also aimed to raise awareness on the importance of good oral health and hygiene to prevent progression and recurrence of disease and reduce the future need of the community. Change for Children and our mentors, Drs. Benhamou, Melki, and Clark, are integral parts of organizing the mission and taking care of the logistics to allow us to focus solely on providing dental care. There are many administrative tasks involved in bringing 44 large boxes of dental equipment into a foreign country. Change for Children and our mentors with their many years of experience had everything planned to maximize our time and efforts while abroad.

Background/Context

We arrived in the capital of Managua and proceeded by bus to the town of Esteli with a population of 119, 000 people. The community that we were treating has poor access to high-quality professional dental care. On top of this issue is their diet which is very cavity-prone, including

copious amounts of soft drinks and high sugar food. This high risk diet, combined with low access to care and poor oral hygiene at home unsurprisingly results in enormous dental issues.

In the field, we observed that many of the patients had very large decay of their teeth which had worsened with time and lack of care. Some of the decayed teeth could be restored, but others had progressed to a point where they were deemed non-restorable and where extraction was the only option. Furthermore, many patients presented with active infections of dental origin in numerous regions of their mouths, which often leads to considerable pain.

Dental caries and periodontal affliction are chronic diseases that progresses over time if left untreated. It is important to address these issues since no one should have to experience pain on a daily basis. Not addressing these issues leads to rapid and premature tooth loss, which is defined as a handicap under the World Health Organisation leading to considerable disability. Tooth loss not only impairs function (chewing, speaking) but it also impairs esthetics which affects psychosocial wellbeing; a great concern for many people we treated. Most of these issues, when addressed in a timely manner, can prevent irreversible consequences such as tooth loss, but when the damage is too extensive, extractions should be performed to avoid further complications.

Activities

We set up a dental clinic in a small medical center in the community. We had to use tables as dental chairs and plastic chairs as operator chairs. Although not ideal, it was enough to be adequately functional. We brought with us our own equipment and supplies (instruments, filling material, anesthetics, etc.) to provide care.

After the clinic was set up, people lined up outside the clinic each morning to receive our care. Each person was triaged individually to evaluate what treatment they wanted and needed. We also needed to classify for each patient which treatments were urgent and of priority, since the demand for treatment was substantial and our time was limited.

Besides oral maxillofacial surgeries and advanced prosthodontic work, we offered almost all types of dental treatment. Specifically, we performed extractions, fillings, root canals, various periodontal and endodontic surgeries, root planings, scalings and cleanings. We also gave free toothbrushes and toothpaste to patients and families, and even visited elementary schools in the nearby area, to reiterate the importance of good oral hygiene and proper diet.

Challenges and Successes

The mission started with some setbacks, as it took time for our equipment to be approved to enter the country. This is a reality some may face while wanting to provide care in a different country and it showed us different challenges encountered by humanitarian missions. The time lost in the process forced us to restrain our help to only one site instead of the two that we'd planned on at the outset. However, we were able to work extra hard on other days and offer more service to the site that we visited. We were very pleased with our accomplishments and the gratitude of the community! As a team, we were able to treat over 500 patients, including over 600 extractions, 425 fillings, 15 root canals, 20 surgeries, over 18 quadrants of deep cleanings and many scalings. This is what we set out to do, and we were able to accomplish it with efficient teamwork, hard work, motivation, perseverance and supervision.

It was touching to see how we gained the trust of the community. People would come back for their care, and would simply lie down trusting that we were there to help them to the best of our capabilities.

Questions Raised

Teamwork "worked" during this fellowship. Each team member brought strengths to the team, and we were able to maximize each strength to synergistically create an efficient team and offer high-quality care to those who didn't otherwise have access to it.

Communication was sometimes difficult, as most of us do not speak Spanish. This was a challenge because understanding and speaking with your patient is a great portion of the care we can provide. This challenge is part of the experience of working in another country and luckily we had

Training and Mentoring

As students, we couldn't possibly have performed the dental work that we did without our supervisors. Our faculty members truly played a crucial role in our education as dental students. When the mission was on hold due to delay in equipment approval, our teachers held a lecture day to teach us the basics of what we would be doing daily and review concepts we had been taught, such as anesthesia and patient management. Throughout the mission, we also had some tutorials (suturing techniques, different periodontal concepts) that further expanded our knowledge.

In terms of clinical training, the amount we learned is immeasurable. On the first day, we had very little experience in exodontia, but by the end, we were all very comfortable and proficient in extracting even the most difficult of teeth! Our training was one-on-one with highly qualified dental clinicians who were eager to teach us. They were patient, taking the time to explain what they were doing or carefully analyzing our techniques, and provided positive feedback to allow us to become better dentists. Not only do we leave with a better understanding of the 'how' to do things, but also on the 'why'. Our mentors were efficient, professional and kind. We succeeded

because of our mentors, and we have developed skills that we have already applied to our work in the student clinic and will continue to apply throughout our dental careers.

What did you learn?

It is fair to say we have all learned a lot about our future careers. As mentioned, our technical skills have exponentially developed. We have learned to work more quickly and efficiently, without compromising quality. We have also learned how to prioritize dental needs when a patient requires a lot of different treatments.

We learned how to work with a community that has a different language and culture as us. We got to see the reality of people with poor access to care, and the consequences of poor oral hygiene.

Community Implications and Further Work

The delivery of oral health care by our team of doctors and student-dentists had an immediate and tangible impact on the health and wellness of the population, particularly when it comes to alleviating pain and infection. Other concerns were dealt with effectively. These ranged from preventative therapies to surgical therapies such as restoring cavities and tooth extractions.

Every patient had their own story to tell but they were all connected through their shared gratitude. The mission allowed us to truly experience compassion and shape our perspective. We learned immensely from the close supervision of the seasoned dentists and specialists whose standards of care remained steadfastly high in spite of the long lineups. It is our belief that the long-term impact of this trip can be summed in the relationship created and cemented between the Nicaraguan people and the Canadian team that went to offer their expertise and help. Our commitment to excellence in providing care spread through word of mouth amongst the patients we treated and their relatives. We saw the lineups grow day by day.

The team gained invaluable experience treating different cases with a heavier load of patients than they were accustomed to in Canada. While our technical skills improved, we were also moved by the lofty goals of the mission and fell in love with the process. Most, if not all of us, would do this over again in a heartbeat.

How might your fellowship make a difference for the people you worked with? The mission leaders were adamant from the start that treatment of all patients in Nicaragua would not be compromised for whatever reason. Having placed the bar high and the standard of care on par to the one in Canada, patients recognized this with every treatment they received. The treatment was professional and ensured the patients participated actively in their treatment. At the end of the mission, we were told by the local doctors at the clinic we visited that everyone

was extremely satisfied with the treatments they received and that our reputation was that of a meticulous quality.

In terms of individuals outside of the community we treated, the government agencies responsible for allowing us to care for the Nicaraguan people now have a resource of patients who can attest for the quality of care they received. In addition, government workers themselves were treated at our mobile clinic, and also had a positive experience. Further away from Nicaragua, people from Canada and Montreal specifically, can see that McGill University dental students are actively involved in supporting not only their own communities through the Outreach programs but international underprivileged communities as well, through dental missions like these ones. It creates a sense of unity and world citizenship that is needed in this day and age.

Program Evaluation

We can confidently say that in our lifetime of being students we have never learned so much in a two week period. Not only about dentistry, but about many aspects of life. After spending two

and a half years learning the fundamental theories about dentistry, we were primed to be sponges for knowledge and this mission happened at the most opportune time for us. The unique experience of working one-on-one with a dentist accelerated our education and skills much farther than we could have expected. The fast-paced nature of the mission allowed us to do many restorations and extractions daily. The learning didn't stop when we left the clinic, because when

you have twenty-two dental professionals sitting around the dinner table you inevitably learn through countless stories. We learned a lot about many different aspects of dentistry from the moment we left until we got back, and every second in between.

As we departed for our mission, we were well aware of the ultimate goal of treating patients in impoverished communities. The moment we began treating patients, we realized that the dentists on the mission had another goal that was just as important to them - educating the students. The educators turned every moment of the day into a new learning opportunity. They were more than happy to explain anything until you understood and were confident enough to do it on your own. They constantly guided with patience and expertise as we slowly navigated through a new procedure, which ultimately created a comfortable learning environment. Each dentist on this mission was a true educator and we will be forever grateful for the massive amounts of knowledge they have given us.

What did you value most about the fellowship?

The learning experiences mentioned above are exponentially amplified when your educators and peers become a family. The mentors of the trip are affectionately known as Mama Bear (Dr. Benhamou), Papa Bear (Dr. Melki) and Care Bear (Dr. Clark) and the students are the cubs. Together we are the Dental Bear Necessities. This is an incredibly important aspect of life that is often lost in our bustling schedules at home. Clearly, the Bear Family was ready to welcome all new members on the trip with open arms. It started from the first morning when we woke up and were greeted with hugs by every member of the team. Every morning started that way. Slowly we grew into a family which instills a dynamic that allows great things to be achieved. The importance of this cohesiveness is often underestimated. One of the highlights was having the opportunity to help cook dinner in a local kitchen for the entire team. The restaurant where we had breakfast every morning kindly opened their kitchen to allow us to cook. We invited our local guide, members of the facility where the clinic was set up and the owners of the restaurant. Our guests were impressed by the novel meal we gave them and filmed every step of our cooking. Having the opportunity to give back to the team and locals on another level added to the overall positivity of the trip.

Any advice for future fellows?

There are few experiences in life that shape your perspective and fundamentally influence who you are as a person. This experience is one of them and to truly enjoy it. One has to breathe in every moment and take in every learning nugget thrown his or her own way. If you want to see dentistry practiced at its highest level with efficiency and precision, learn from the best, be disciplined, experience minimalism, and overall find a purpose for yourself, at least for two weeks, this trip is a must. An open mind is all you need.

You waste no time becoming members of the same family with the other fellows. Their support is vital and necessary for a smooth and successful mission.

This mission was part of a new course held at McGill University Dental School. Despite being a new course, the leaders of the group have been doing yearly dental missions for the past 15 years. They have experience in both teaching and clinical dentistry. They are the ideal mentors any dental student would want to have to learn and advance their careers. Dentistry is not the only thing we learned on this mission, as discussed many times in this report; there are many life lessons to be learned for a fellow with an open mind and an open heart. We highly encourage future fellows to apply for next year's mission and help fund it through various fundraising activities. All one needs to prepare for this mission is to listen and listen carefully and attentively. Everything the leaders say is said through a lens of 15 years of experience. Seize it, enjoy it, live it and learn from it.