

## Report on AusBanglaCareforDental (ABCD) Program International Dental Volunteer Visit 7-20 September 2015



### Background

The AusBangla Care for Dental (ABCD) program is registered with the Rotary Australia World Community Service Ltd (RAWCS), Project number 51/2013-14. The stated objective of this project is to:

*"provide essential dental care/services for the poor people in schools and slum areas in Dhaka and in rural regions of Bangladesh."*

On 23 July 2015 the ABCD program was approved by the NGO Affairs Bureau in Bangladesh, with the 12 month project period to start on 1 August 2015. In this period there will be 10 monthly dental camps - each of 2 days duration - using local dental teams in schools in a slum area in Dhaka, and one rural dental camp using local dental teams from Dhaka, working with an international volunteer dental team.

A Memorandum of Understanding (MoU) was developed between the Rotary Australia World Community Service (RAWCS) and the NGO Forum for Public Health. The Rotary Clubs of Dhaka (Bangladesh) and Dee Why Warringah (Australia) are also parties to the MoU.

Depending on which statistics one notes (as there are some variations on available information), the dentist to population ratio in Bangladesh is approximately 1: 23,000. Please note, this is not exact as the Bangladesh Medical and Dental Council records those dentists who are permanently registered, plus those with temporary registration. These figures differ slightly from last year's report, due to updated registration information.

Whichever way we look at it, the poor and rural people are the ones who are not receiving dental care, which is generally delivered on a fee for service basis by private dental clinics. Many people suffer episodes of extreme dental pain and infection in their lives. They try to deal with this by using natural (ayurvedic) medicines, and/or repeated doses of antibiotics and analgesics if available. However these do not solve the problem as the affected tooth or teeth must receive professional treatment. The reliance on dental "quacks", ie untrained people providing "dental care" is almost as serious a problem, as the result of "treatment" by these people could actually worsen any dental problems due to a lack of dental knowledge.



Young girl with a dental abscess draining externally. This is due to long term infection and no dental care



Dental decay which has destroyed all the primary (milk) teeth

The purpose of the September 2015 visit was to implement the program according to the new MoU, building on the foundations established by the program partners in the running of dental camps in August 2014. The visit incorporated a monthly dental camp in the Mirpur area of Dhaka, and the rural dental camps which were carried out in locations in Brahmanbaria and Sylhet.

### **Preparations and Dental Equipment**

Mr Rizwan Ahmed from the NGO Forum worked with Dr Shahana (Sunny) Dastagir to purchase the necessary dental equipment and supplies. The ABCD team worked with NGO Forum's partner agencies to identify the camp locations.

Two volunteer dentists from Australia accompanied Drs Nahid Sayma and Dr Sandra Meihubers (ABCD Program Coordinators): Dr Yvonne Huijser van Reenen and Dr Hans Raets. The team members brought supplementary dental supplies and donations from Australia.

The dental team attended the meeting of the Rotary Club of Dhaka on 8 September, where the team members were welcomed, and the Australians each received a club banner and confirmation of support for the program.



ABCD dental team members with President Nasim and members of RC Dhaka

### **Dental Camp Format**

At each camp patients were coordinated by local volunteers and support staff to attend the registration/screening area, which was managed by 2 dentists and assistants who recorded the relevant patient information, and noted dental treatment they might need.

If the patients agreed with the proposed dental treatment they then moved to the dental treatment room for the necessary dental care. Verbal consent was obtained from adults for their dental care. If a child under the age of 18 years required a tooth extraction then consent was obtained from their parent or guardian.

Three dental chairs were set up in the treatment room, with dentists rotating among these chairs. A dental technician - Mr Md Rofiqul Islam - managed the flow of dental instruments and supplies. Mr Md Masudur Rahman from the NGO Forum worked diligently on cleaning and sterilising the instruments and the watchful eye of Mr Md Arifur Rahman from NGO Forum helped to ensure the dental teams had everything they required.



Dental screening room at Anando Niketon Primary School, Bauniabadh

Two intern dentists - Dr KC Debnath and Dr Amrit Shrestha - worked closely with their senior dentist Dr Sunny and the Australian teams in all the camps. Dr Sunny also delivered instruction on tooth brushing techniques to the school children. Three dentists: Dr Siddhartha Aryal, Dr Shaira Sahid and Dr Hasan Iqbal Shovon, worked in the Dhaka camps.

After a somewhat shaky start, the dental camps progressed to becoming well run events. Extra supplies were procured to ensure safe and effective dental care is provided (for example the move to use local anaesthesia solution in disposable glass cartridges), and techniques such as cleaning and sterilising instruments were brought up to safe and acceptable standards.

The protocols developed in the camps will form the basis of the running of future ABCD dental camps. A procedures manual will be developed to document the protocols, so that all who work in the program will understand the running of the program.



Dental treatment room, Basudev Government Primary School, Post Office Basudev, Brahmanbaria

Two mini vans were used for transporting teams and gear to the dental camp locations. The drivers for the rural camps - Mr Zolil Sikder and Mr Md Hafizur Rahman - ensured we arrived safely, and kept an eye out for photogenic rest stops.

### **Dental Camps in Dhaka**

Two one-day camps were held in Dhaka, at:  
Pallabi Degree College, Section-8, Duary Para, Pallabi, Mirpur  
Anando Niketon Primary School, Bauniabadh, C Block, Pallabi, Mirpur

Adult and child patients were treated at these camps. NGO Forum and school/college volunteers helped to manage the movement of patients between the registration/screening and dental treatment rooms. Visits by the President and other members of the Rotary Club of Dhaka were welcomed by the teams.

### **Rural Dental Camps**

There were two dental camps in Brahmanbaria, at:  
Basudev Government Primary School, Post Office Basudev, Upazila, Brahmanbaria Sadar, Brahmanbaria

And three dental camps in Sylhet:

Baruna Faizar Rahman Government Primary School, Union: Kalapur, Upazila: Srimongal, District: Moulavibazar

Bishamoni High School, Union: Srimongal, Upazila: Srimongal, District: Moulavibazar

Shatgao High School, Union: Shatgao, Upazila: Srimongal, District: Moulavibazar

The main target groups in these locations were the school children. Once again the dental teams were greatly assisted by local volunteers, and were greatly impressed by the enthusiasm of the senior students who took on the dental and management duties with great gusto, as well as by the other volunteers and support staff who worked tirelessly to ensure the camps ran as smoothly as possible.

## Numbers of People Treated and Services Provided

The table below lists the services provided at the various locations.

Location	Total examined	Total treated	Fillings	Extraction	AgF
<b>DHAKA</b>					
Pallabi Degree College, Section-8, Duary Para, Pallabi, Mirpur	115	34	16	23	16
Anando Niketon Primary School, Bauniabadh, C Block, Pallabi, Mirpur	123	54	23	35	12
<b>BRAHMANBARIA and SYLHET</b>					
Basudev Government Primary School, Post Office Basudev, Upazila, Brahmanbaria Sadar, Brahmanbaria. Day 1	130	68	60	29	72
Basudev Government Primary School, Post Office Basudev, Upazila, Brahmanbaria Sadar, Brahmanbaria. Day 2	173	77	55	49	49
Baruna Faizar Rahman Government Primary School, Union: Kalapur, Upazila: Srimongal, District: Moulavibazar	193	88	71	42	84
Bishamoni High School, Union: Srimongal, Upazila: Srimongal, District: Moulavibazar	159	62	87	30	28
Shatgao High School, Union: Shatgao, Upazila: Srimongal, District: Moulavibazar	128	54	92	28	35
<b>TOTALS</b>	<b>1021</b>	<b>437</b>	<b>404</b>	<b>236</b>	<b>296</b>

Total examined	the numbers of people receiving a dental examination/assessment/advice at the screening desk
Total treated	the numbers of people receiving dental treatment in the dental clinic room
Fillings	the numbers of fillings provided
Extractions	the numbers of teeth extracted (pulled out)
AgF	use of Silver Fluoride, a chemical agent used to halt ("arrest") the progress of decay

Those people not receiving treatment generally had good oral health, but most required and received oral hygiene advice which was not recorded in these camps but will be noted in future camps. There were some cases where the treatment required was beyond the capacity of the dental camp for example people requesting root canal treatments, people requiring general scaling, orthodontic cases, denture needs, and pathology referrals. There were also treatment refusals - crying children, and some adults who refused extraction of teeth which were beyond saving.

The team also collected data on the numbers of teeth affected by decay - the DMF index, ie the average numbers of decayed (D), missing ie extracted previously due to decay (M) and teeth with a filling in a tooth affected by decay (F). This is an index used internationally to give an indication of the levels of dental disease in a population. The data will be analysed and a report issued at a later date.

In future the program will also consider the collection of oral health profile data such as levels of gum disease, dental pathology, types of tooth cleaning techniques and other relevant data.



Team photo at Basudev Government Primary School, Brahmanbaria

As anticipated there are great needs for dental care in the locations visited, reflecting the issues of lack of access in these areas, and lack of affordability of dental care if it is available. There were high rates of dental decay in young children and adults were suffering long term pain and infections. Some of the effects of dental disease could become life threatening if not treated, for example the young girl with the dental abscess (photo on page 1 of this report).

The need is most likely nationwide, causing the ABCD program to consider how it can be most effective at this stage, given the small beginning. We could run everywhere trying to help in some small measure, but we would spread ourselves too thinly with no substantial long term result. Hence our discussions always focus on effective use of our available resources, and working with targetted communities such as school children in the slums, and defining the rural locations visited. We will develop a local referral network, to try to enable access to care for those whose needs are more than what we can provide in the camps, and consider expansion of the program over time, resources permitting.

### Lessons Learned and Future Planning

- Dental decay is "rampant" in many children, especially in the primary ("milk") teeth. The introduction of the Silver Fluoride technique will help to manage the decay in kids, as it avoids the conventional approach of using a drill to prepare a tooth for a filling. This "atraumatic" approach has been used for decades in high risk communities in Australia with great success, and keeps the kids happy during dental treatment.
- The ABCD program will continue to focus on an overall preventive approach, with pit and fissure sealants a priority for young children and adolescents. Future data and service recording will enable ongoing evaluation of the program's impact on the dental health of the target groups.
- The program needs to also consider the scaling of teeth, and how to incorporate gum health care into the services provided.
- The Dhaka dental team will continue the monthly dental camps in the Mirpur area, applying the protocols developed during the camps. Oral health education for children especially will become an integral component of the program, which will focus on improving the oral health of target groups in the 6-8 year age group initially.
- Given the high rates of dental decay in the children, the program will continue to seek ways to implement a school based toothbrushing program (where children brush their teeth once per day at school, under the supervision of teaching staff). However the teams had to focus, at this stage, on implementing and refining the dental camps procedures and protocols.
- It was agreed that Dr Kala Chand (KC) Debnath would be contracted to work as the local Coordinator for the monthly camps in Dhaka.
- The Rotary Club of Dhaka continues to provide support to the ABCD program, and will endeavour to supply toothbrushes and other program support, in partnership with NGO Forum and Dr Sunny.
- The dental equipment requires some upgrading to allow for high speed preparations for fillings, and ultrasonic scaling of teeth. Discussions are occurring between the program Coordinators and equipment experts to identify the most appropriate dental units for the program.
- Future data collection will include the other conditions observed, to provide a better overview of dental needs.
- The program Coordinators in Australia will consult with research experts to see how the program can capture useful information that will guide program improvements, and raise awareness of the dental needs in Bangladesh.

- An online tutorial session is being organised for the Dhaka dental teams with Dr Graham Craig, the originator of the Silver Fluoride/atraumatic dentistry techniques.
- NGO Forum will advise on budget expenses so far.
- Volunteer dental visits will be planned for the cooler months - sweaty September can be quite exhausting.
- The ABCD program will run til 31 July 2016, at which time the Partners will assess the 12months of operations before determining future directions.



Let's keep their teeth strong and their smiles even stronger.

### **Acknowledgments and Thanks**

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 Mr Rizwan Ahmed (NGO Forum)  
 Mr Md Arifur Rahman (NGO Forum)  
 Mr Md Masudur Rahman (NGO Forum)  
 Dr Kala Chand Debnath (Dentist)  
 Dr Amrit Shrestha (Dentist)  
 Mr Zolil Sikder (Driver)  
 Mr Md Hafizur Rahman (Driver)  
 Mr Md Rofiqul Islam (Technician)  
 Dr Yvonne Huijser van Reenen (Volunteer Dentist)  
 Dr Hans Raets (Volunteer Dentist)  
 Dr Nahid Sayma (ABCD Coordinator)  
 Dr Sandra Meihubers (ABCD Coordinator)

To the volunteers and school and field staff who enriched the camps through their enthusiasm, hard work and infectious spirits.

A group of people from varied backgrounds coming together, working through the ongoing challenges, devising solutions, learning from each other and ultimately uniting through a professional goal of providing high quality dental services to those least able to access them. From which flow laughter, respect, shared experiences and ongoing relationships. And many more friends and likes on Facebook (whatever that means....).

To GC Australia and Southern Dental Industries (SDI), for donations of dental supplies and to all the program donors and supporters, a great thank you.

Sandra Meihubers  
 October 2015



Dental team on the road, returning to Dhaka  
From the left: Rizwan, Arif, KC, Amrit, Rofiqul, Hafizur, Zolil, Masud, Yvonne, Hans, Nahid, Sunny.  
SM is taking the photo.