

# “Assessing the aspects of dental care delivered by a non-profit organisation to a disadvantaged community in Phnom Penh, Cambodia”



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## **Mary-Jane Thompson and Anjali Vasudev**

This summer, we were lucky enough to be part of a great team of six volunteers providing dental care to villagers in the rural provinces of Phnom Penh, Cambodia. The charity we worked with, 'One2One', is a non-profit organisation that offers free treatment to disadvantaged people and those with HIV/AIDS, who otherwise would not be able to afford it. We chose Cambodia as our destination because it is culturally very different to the United Kingdom and has a great need for dental care. We also wanted to explore somewhere that we had never visited before. Thanks to the support of Bristol Dental Alumni, we were able to fund our medical expenses, such as vaccinations and HIV prophylaxis, which were crucial for our safety on this trip.



**Map of Cambodia highlighting the capital Phnom Penh**

The main aim of the project was to review the delivery of dental care by the One2One charity, to disadvantaged communities in Phnom Penh, in the context of “safety”, “effectiveness” and “patient experience”, following Lord Darzi’s model of healthcare quality used in the NHS. We also wanted to identify the challenges faced while volunteering and reflect on the differences between our experience practicing dentistry in Cambodia with our standard of work in the UK.

Our main method of data collection was in the form of an observational diary, in which we included a personal reflection on our experience as a practitioner. To evaluate safety, we noted limitations in equipment and materials, training, sterilisation and waste disposal. Effectiveness was considered by observing communication and the process of obtaining consent. It was difficult to measure the ‘quality’ of the work carried out because quality is subjective and we did not have time to assess each other’s work due to the fast patient flow. Patient experience was measured qualitatively by asking patients to point to a “happy” or “sad” face to represent their level of satisfaction with their care. In our diaries, we recorded patient demographics and included a tally chart of the number and type of treatment that we carried out. Finally, we discussed with the team how the challenges we faced impacted the level of care that could be provided in this setting and how this ultimately affected patient satisfaction.

When we arrived at the One2One guest house, one of the first things we were told was that, a couple of days previously, a volunteer had acquired a needle-stick injury and the patient was found to have Hepatitis C. As excited as we were to be there, this news really hit home how much of a risk we were taking, working in such a deprived area, where the prevalence of blood borne viruses was much higher than in the United Kingdom.

Not long into treating our first patients, we quickly realised the challenges that we would be facing over the next two weeks. One of the main issues was the language barrier which applied to both the patients, who did not speak English and the dental assistants, who struggled to understand our requests. To overcome this, we used hand signals and learnt

some dentally relevant Khmer language - surprisingly, we discovered that it is possible to carry out an appointment using only four words: open, pain, numb and close! Other issues, such as the heat, flies (which occasionally even landed in the patient's mouth!) and basic living conditions made the experience even more testing.

There were some obvious differences compared to dentistry back home; firstly, there was no suction and instead, patients had to spit in a bin at the foot of the chair! This was less comfortable for them and prolonged treatment time. Anaesthetic was limited and reserved only for extractions and deep fillings. As a result, much of the treatment was carried out without anaesthesia, which was new to us, as it is frequently used in England. The cross contamination protocol was also notably different: autoclaves were replaced with pressure cookers and the bay was cleaned briefly with a spray of vodka. We were pleasantly surprised at the array of materials and equipment available, however, the limited supply meant that we had to think on our feet and come up with acceptable solutions that were within our means.



**Hard at work in a school in a rural Cambodian village**



**Patients waiting to be treated**

Dental decay was extremely prevalent in this population and most patients required at least 5 or 6 procedures. The main age group treated was 11-20yrs as the mobile clinics were set up in schools. We were impressed at how well behaved and compliant the patients were, especially considering the amount of treatment they were having in one sitting; it was evident that they valued their dental care!

Despite the challenges, we thoroughly enjoyed volunteering – we were out of our comfort zone to begin with but have returned more experienced, confident dentists. Even though there were obvious limitations in equipment and communication, One2One did a fantastic job of providing treatment to disadvantaged villagers who otherwise would not have access to care. During the programme, we were able to carry out numerous fillings and improve our extraction skills, which we can now do more aesthetically and in a shorter amount of time. We even developed skills in rice production when we were unexpectedly taken (still in our scrubs!) to sow seeds in the paddy fields! Providing treatment to patients in desperate need was a humbling and rewarding experience and we have made great friends in the process.





**Getting involved with the locals planting rice in our scrubs**



**The team of volunteers on the bumpy mini-bus ride to the school**

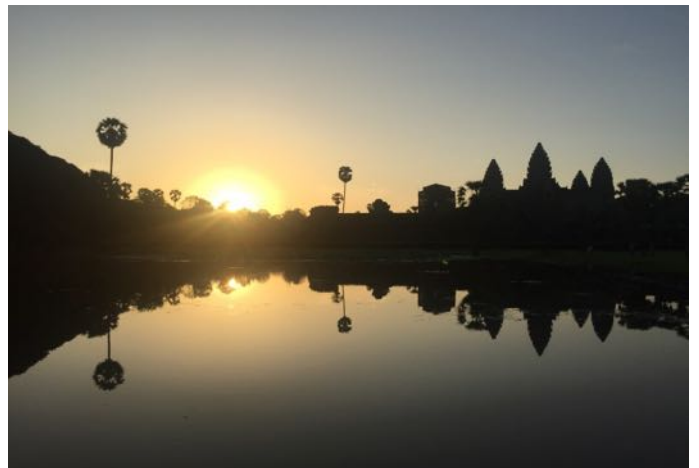
Outside of the project, we were able to fit in three weeks of personal travel around Thailand, Cambodia and Malaysia. During this time, we submerged ourselves in the local culture and explored the natives' religions, food and traditions. We made an effort to learn about the history of Cambodia in particular and a trip to the morbid killing fields in Phnom Penh gave us an appreciation for the brutality of the Khmer Rouge - we were able to relate this history to the current shortage of dentists and the effect that it has had on the dental sector in Cambodia today. Despite their traumatic past, the Cambodians were some of the kindest people we have met – they were incredibly welcoming and their positive, calm way of life was admirable. Even though poverty was real in Asia, there was never a lack of smiles which, for a dentist, was lovely to see!



**Skulls displayed in the memorial monument and a mass grave at the killing fields, Phnom Penh**



**Grand Palace, Phnom Penh**

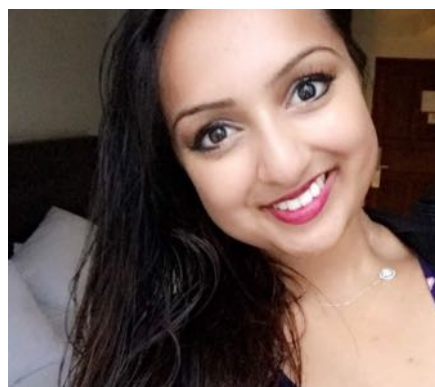


**Angkor Wat temple at sunrise, Siem Reap**

This trip of a lifetime would not have been possible without the generous support of Bristol Dental Alumni. We are very grateful to the committee for choosing to back us on our adventure and are looking forward to applying our newly learnt skills back in the UK. Thank you!



**Mary-Jane Thompson**



**Anjali Vasudev**