Summer Vacation Thalassemia Ward Experience

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Last summer, I had the opportunity to intern at Indian Red Cross Center (RCC), Pune. My focus was on the thalassemia ward. I worked there between June 25 to July 6, 2018, mostly from 9 am to 4:30 pm. Following are the excerpts from my journal for some of the days that captures my experience.

Monday, June 25, 2018
This morning I started my two week long internship at Red Cross Center, Rasta Peth, Pune.

I had to reach at 9:30-10 am being the first day, and I barely reached by 10 am. This was due to the 9 am Pune traffic. As it was the first day, my father dropped me. From tomorrow, however, I will be taking the bus or cab, and now that we have the experience, I will be able to get there on time.

Being first day, I met with Prof. R. V. Kulkarni (General Secretary of RCC) and Mr. Jatin (Social Worker). They discussed with me, the Thalassemia Ward where I and other interns will be learning for the next 2 weeks. Mr. Jatin was assigned as my immediate mentor.

They explained to me that Thalassemia is a hereditary disease that requires a patient to have repeated blood transfusions over the years. For my IB DP extended essay, I plan to collect data on thalassic patients and presence of Consanguineous Marriages in their family tree. I had requested Mr. Jatin to do a trial, by asking patients and their families to fill out draft forms I'd be giving during my last visit. I was looking to understand the reaction of patient families to such sensitive topic.

I also got a chance to talk to a few of the children. We interns were able to put smiles on their faces by playing with them, and letting them draw on our iPads. One child, in particular, told me about his aspirations in life, which was being a train conductor. Just nine years old, he was determined to achieve his goal, despite battling with Thalassemia. I asked him some questions about his condition, which he tried to answer the best he could. He was enthusiastic, even while going through chelation, which is a process in which the iron levels in the body are reduced. The little patient didn't want anyone's sympathy or pity; he knew what he had, understood it, accepted, and wanted to do his best in life. He was simply happy that he had company while going process, and he finally had someone to talk to.

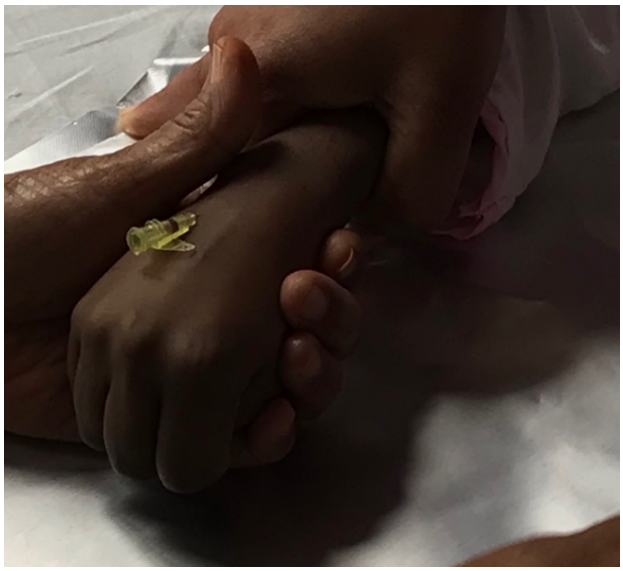
Seeing a person so young battling with a possibly fatal disease, getting happy at the simplest things such as drawing and having company really humbled me. It really made me rethink about all the problems in my life, and realised that my problems seem minuscule. Mr. Jatin, being a patient himself, told us about how the blood transfusions become a part of their routines, however a visitor/volunteers make it a bit more endurable and fun. A lot of emotions for the first day!

Tuesday, June 26, 2018

On the second day we reached the thalassemia centre 20 minutes earlier that the rest of the staff, which I saw as a learning. This experience is helping me appreciate life of a medical employee.

Today, I was able to observe and take many pictures of the different steps leading to the blood transfusion - blood matching, pricking and fixation, chelating, blood pressure checking, and finally the transfusion. During this process I learned a lot of things, such as during pricking and fixation of the needle on the most prominent nerve on the wrist, you never include the thumb in children.

Pricking-

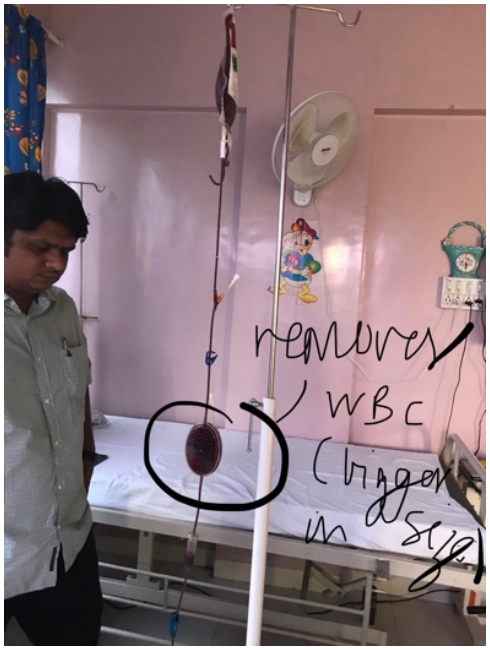


Fixation of Needle

This is because children often fidget with their fingers and thumbs, and including the thumb while fixating the needle on the child's wrist can cause more harm than good. Chelation, as I was explained, is usually a twenty-four-hour process which costs a lot of money, which many of the patients' families don't have. So, the Thalassemia Ward helps reduce the price by inviting them in for only a few hours on separate days for the process.

I also learned that during the actual blood transfusion, the blood given to the patient must not contain any white blood cells, as it has been known to cause nausea and other sicknesses. I took many pictures to help document the procedure, which can be seen at the end of this report.

Blood Transfusion



I was able to observe blood matching and identification. The procedure is around 45 minutes, with the preparation and 2 processes. It uses 2 steps - one uses an Anti sera test and two uses refrigeration of blood bags, centrifuge, serum extraction, incubation, and again centrifuge only to judge if the donated blood is compatible for the patient.

I then spent time with patients getting blood transfusions, them educating me about the process, the scientific terms, and the explanations behind certain acts. They didn't find my curiosity offensive, which I was thankful for, as they understood my interest in the field of medicine.

June 27-28-29, 2018

After discussing with Prof Kulkarni, my assignment was divided into multiple components:

1. Thalassemia Learning through books, publications and quasi-government sites such as CDC, NIH.
2. Observing end-to-end Blood Transfusion Process
3. Designing a survey aimed at investigating the link between consanguineous marriages and thalassemia.
4. Normal conversation to patients
5. Help in planning and preparation of the Thalassemia Day (delayed) celebration.
6. Talk to other professors and understand the many rules and regulations, and their own experiences.

June 30, 2018

Today, Red Cross Center was celebrating Thalassemia Day, delayed. They had invited more than 50 patients and their families. RCC sees this celebration as a day to allow parents to relax a bit with kids engaged in activities, their favorite snacks and one or two informative presentations to patent.

I got the chance to present our disease identification website, eSymptoms, to the parents and officials of the Red Cross Thalassemia Center. The presentation was in the Hindi language as most parents are not well educated. It went very smoothly, except for one tiny slip up, which the audience very politely helped me with. My Hindi really got tested as I had to translate many English medical words into Hindi. I got good questions and feedback. Later on, they all asked me to help them set this website on their mobiles.

Presenting eSymptoms –

I then sat with each of thalassic patients to fill my survey form relating consanguinity. I was surprised to find, that most families were very forthcoming about such presence of inter-family marriages in their family tree. What was encouraging, is that they saw my efforts as helping the next generation.

Finally, I got time to spend with the children again, who were all drawing by the time I was done with the surveys. They all had different artworks, most of which contained drawings of what inspired them the most.

July 2-6, 2018

Most of my days went into observing the transfusion process. As being a high school student, I could not assist the nurse or the doctor. So, I also read books on Thalassemia to understand the genetical science involved. One of the reasons I was looking to do this internship was to find my own reaction to blood, needles, and pain. If I want to be in medicine, this was my second checklist item.

One thing that was very clear, even though the world thought they were simply handicapped, they failed to see the strong hearts of the children, fighting through life to get to the goals they wanted to reach. This experience taught me to be thankful for everything I have in life. Also, if they can have the will to reach their goals, I must have the courage and the will to reach my dreams.

Thank you, Professor Kulkarni, Jatin & Red Cross for an eye-opening experience!