

**Date:** 9<sup>th</sup> November, 2022

**Time:** 9.30 am – 4.30 pm

**Venue:** Seminar Hall, Centenary Building, Asutosh College, Kolkata

**Title of the event:** Thalassemia Awareness and Screening Program

**Name of the Department:** Biochemistry

**Organizing Committee:** Department of Biochemistry in association with IQAC and Health Care Unit, Asutosh College & Nilratan Sircar Medical College & Hospital, Kolkata

**Speaker details:**

**Dr. Soumya Mukherjee**, MBBS, MD, DM (Clinical Haematology), Consultant Haematologist and Haemato oncologist, Ruby General Hospital, Kolkata

**Dr. Tuphan Kanti Dolai**, MD (Medicine), DNB (Medicine), DM, Professor and Head, Department of Haematology, Nilratan Sircar Medical College and Hospital, Kolkata

**Summary of the event:**

The Department of Biochemistry organized the one-day thalassemia awareness and screening program in coordination with NRS Medical College and Hospital, Kolkata. The program was divided into two parts: (a) seminar lectures on thalassemia and (b) blood testing for screening of thalassemia. The seminar lectures were delivered by Dr. Soumya Mukherjee, Consultant Hematologist and Hemato Oncologist, Ruby General Hospital and Dr. Tupahn Kanti Dolai, Professor & Head, Hematology, NRS Medical College & Hospital, Kolkata.

The lectures focused on the description of causes of thalassemia, the global and national statistics of prevalence of the disease, the types of thalassemia, the signs and symptoms of the disease, the role of genetics towards the disease manifestation and the treatments. The main target of these two lectures was to aware the audience about the prevention of the disease. The only way to do this is to have blood testing to know whether the individual is normal or a carrier of the disease. In this respect, the physicians also discussed about the different methods of testing thalassemia (HPLC, CE). They mainly highlighted and emphasized on the fact that how the knowledge about one's own status of whether the person is a carrier is important to determine the fate of the future off-springs. Since the thalassemia is an autosomal recessive disorder, the chances of occurrence of the disease among the off-springs is 25% and 50% if one of the parents is carrier and both of them are carriers respectively. The

physicians vividly described that how an individual born with thalassemia becomes a burden for himself/herself, for the family and for the society overall as they require continuous blood transfusions which are not only costly but also decreases life expectancy by giving rise to numerous physiological complexities. Therefore, the screening of thalassemia is utmost necessary. The physicians also mentioned that though India has not yet accepted this as a law, many countries like China, Sri Lanka, Cyprus have made the screening of thalassemia a compulsory necessity by law for every citizen before marriage and how this has helped to eradicate the disease in many places like Cyprus. There was a discussion on the various challenges faced in the country regarding the spreading of awareness about thalassemia particularly in rural areas.

The counseling for thalassemia screening was done by Dr. Dolai himself and the screening was done by a medical team of five members from the haematology department of NRS Medical College & Hospital, Kolkata. The participants were from the students from the different departments of Asutosh College, Kolkata.

The reports were generated by 24th November and collected by the department of Biochemistry and distributed to the students. Total 57 students participated in the screening programme whereas 3 of them were detected to be carrier of the disease i.e. 5.26% of the total population tested. Those three were counseled for testing of their siblings for thalassemia also and they were also informed that they must go for testing for the same for their spouses before they get married.

**NB:** The reports are not attached here for the confidentiality purpose.

### **Benefits/outcome of the initiative for the students:**

The sole purpose of the conducting the Thalassemia Awareness and Screening Program in the Department of Biochemistry is to aware the students about the disease and encourage them to donate blood for their own thalassemia testing. Therefore, the two highly enchanting lectures enlightened the participants with facts about the disease and the importance of screening themselves for the disease. The students will also share the knowledge with others inside and outside the college which will help to develop a mass awareness in many parts of the society. This initiative also benefitted the students to have their own testing for thalassemia at free of cost.

**Future Goal:**

This organising committee has a plan to make it an annual program so that each year newly admitted students could get a chance to enrol themselves for this program and test themselves. Thalassemia campaign at socially backward population is another future target as an outreach program.