AWARENESS PROGRAMME ON THALASSEMIA

To observe NATIONAL YOUTH DAY-YUVA DIVAS-2025

Date: 20th January 2025
Time: 11:30 am-1.30 pm
Venue: Gallery Room, Vivekananda Baan, Raidghi College
Organized by: Raidighi College NSS Unit-1 in collaboration with Amra Rakta Yoddha Group
Chief Patron: Dr Sasabindu Jana- Principal, Raidighi College
Resource Person: Shri Malay Kumar Hati, MT, Lab Raidighi Rural Hospital & Member of Amra Rakta Yoddha Group, Raidighi
Student Participant no: 87
Teachers:04
Non-teaching:01
Programme Officer (PO-1): Dr Arvinda Shaw

Introduction:

Thalassemia is a genetically inherited blood disorder that affects the body's ability to produce hemoglobin, a vital component of red blood cells. Hemoglobin carries oxygen from the lungs to the rest of the body, and in people with thalassemia, this process is disrupted, leading to severe anemia and other serious health issues. Despite being preventable, thalassemia continues to affect millions of individuals worldwide, particularly in regions such as South Asia, the Middle East, the Mediterranean, and parts of Africa.More than 10,000 newborns are born with Thalassemia in India every year because there is not enough awareness among the general population. On January 20, 2025, Raidighi College NSS Unit-1 organised an awareness programme on Thalasemia to disseminate knowledge about it among the students and volunteers.

Objectives of the Programme:

1. **Increase Public Awareness:** Educate people, students and volunteers about what thalassemia is and how it affects the human body.
2. **Promote Carrier Screening:** Encourage early screening, especially for couples planning to start a family.
3. **Reduce Stigma:** Dispel myths and social stigmas surrounding genetic disorders.
4. **Promote Blood Donation:** Encourage regular voluntary blood donation to support those undergoing treatment.
5. **Support Affected Families:** Connect individuals with medical, psychological, and community support systems.
6. **Advocate for Policy Change:** Urge governments to implement nationwide screening and prevention programs.

Understanding Thalassemia:

What is Thalassemia?

Thalassemia is a group of inherited blood disorders characterized by reduced or absent production of one of the globin chains that make up hemoglobin. The two most common forms are:

- **Alpha Thalassemia:** Caused by defects in the alpha globin gene.
- **Beta Thalassemia:** Caused by defects in the beta globin gene.

Beta Thalassemia is more prevalent and further classified into:

- **Thalassemia Minor (Trait/Carrier):** A person carries one defective gene but usually shows no symptoms.
- **Thalassemia Major (Cooley's Anemia):** A person inherits two defective genes, leading to severe anemia that requires lifelong treatment.

Causes and Risk Factors:

Thalassemia is inherited in an autosomal recessive manner. A child must inherit the faulty gene from both parents to develop thalassemia major. If both parents are carriers, there is a:

- 25% chance the child will be affected (thalassemia major),
- 50% chance the child will be a carrier (thalassemia minor),
- 25% chance the child will be completely unaffected.

The risk is higher in populations where consanguineous marriages (marriage within the family) are common.

Symptoms of Thalassemia Major:

Symptoms usually appear within the first two years of life and include:

- Severe anemia
- Fatigue and weakness
- Pale or yellowish skin
- Facial bone deformities
- Slow growth and development
- Enlarged spleen and liver
- Frequent infections

If left untreated, thalassemia major can be life-threatening.

Diagnosis and Screening:

Early diagnosis plays a vital role in managing and preventing thalassemia. Key diagnostic and screening methods include:

- **Hemoglobin Electrophoresis:** Identifies abnormal hemoglobin variants.
- **Complete Blood Count (CBC):** Checks for anemia and red blood cell size.
- **Genetic Testing:** Confirms the presence of mutations in globin genes.
- **Prenatal Diagnosis:** Includes chorionic villus sampling (CVS) and amniocentesis to detect thalassemia in the fetus.

- **Premarital and Preconception Screening:** Helps couples understand their carrier status and reproductive options.

Treatment and Management:

There is currently no universal cure for thalassemia, except for bone marrow or stem cell transplantation in some cases. Management focuses on improving quality of life and includes:

1. Regular Blood Transfusions:

Patients with thalassemia major often require blood transfusions every 2–5 weeks to maintain healthy hemoglobin levels.

2. Iron Chelation Therapy:

Frequent transfusions cause iron overload, which can damage organs. Iron chelators (e.g., deferoxamine, deferasirox) help remove excess iron from the body.

3. Folic Acid Supplements:

Support red blood cell production.

4. Bone Marrow/Stem Cell Transplant:

A potential cure, especially if performed early, but it carries risks and requires a matched donor.

5. Psychosocial Support:

Counseling and emotional support are essential for both patients and families to cope with chronic illness.

Prevention is the Key:

Preventing thalassemia starts with awareness and education:

- **Public Education Campaigns:** Use schools, universities, social media, and community centers to spread knowledge about thalassemia.
- **Genetic Counseling:** Essential for at-risk couples to understand their reproductive choices, including prenatal diagnosis and in-vitro fertilization with pre-implantation genetic diagnosis.
- **Mandatory Screening Policies:** Some countries have implemented national screening programs for high-risk populations, significantly reducing new cases of thalassemia major.

Role of the Community:

Voluntary Blood Donation Drives:

People with thalassemia major rely on regular blood transfusions. Community blood donation drives can help ensure a steady and safe blood supply.

Creating Support Networks:

Support groups provide patients and families with a sense of belonging and shared experiences. They offer emotional, financial, and logistical help.

Education and Awareness Events:

Workshops, seminars, health fairs, and media campaigns can help normalize discussion around genetic conditions and promote inclusivity.

Thus Raidighi College NSS Unit-1 made a small effort by organising an awareness program on YUVA DIWAS-2025, where more than 87 students, volunteers and teachers participated. This event was attended by the Principal of Raidighi College who gave the inaugural speech, Dr Arunima Biswas, HoD, Dept. of Microbiology, who in her short speech stressed on the need for such awareness programmes and appreciated the efforts made by the NSS unit.
Guest Resource person-Shri Malay Kumar Hati, member of Amra Rakta Yoddha Group and associated with M.T Lab, Raidighi Rural Hospital, gave a detailed presentation to our participants and discussed ways for prevention like Pre-marital screening, Carrier screening, and Prenatal screening. All these facilities are provided free of cost at Government Hospitals.
Dr Hamid Iqbal, HoD, Dept. of Political Science, Mr Sital Sing, Faculty Dept. of Education, Mr Hamidur R. Molla, HoD, Dept. of Physical Education, Raidighi College were other participants who actively participated in this program.
Efforts made by NSS Program Officer Dr Arvinda Shaw was appreciated by one and all.

Conclusion:

Thalassemia is a preventable yet widespread genetic disorder. Through education, early screening, compassionate care, and active community participation, we can significantly reduce the burden of this disease. The fight against thalassemia is not only medical but also social—it requires informed individuals, strong healthcare systems, and collective responsibility. Raidighi College NSS Unit 1 through such an initiative is trying to generate awareness for a thalassemia-free future for the coming generations.

Acknowledgement: Raidighi College and NSS Unit-1 extend heartfelt gratitude to **Mr Malay Kr. Hati** for accepting our invitation to act as a resource person and spreading awareness on such an important issue among students and volunteers.


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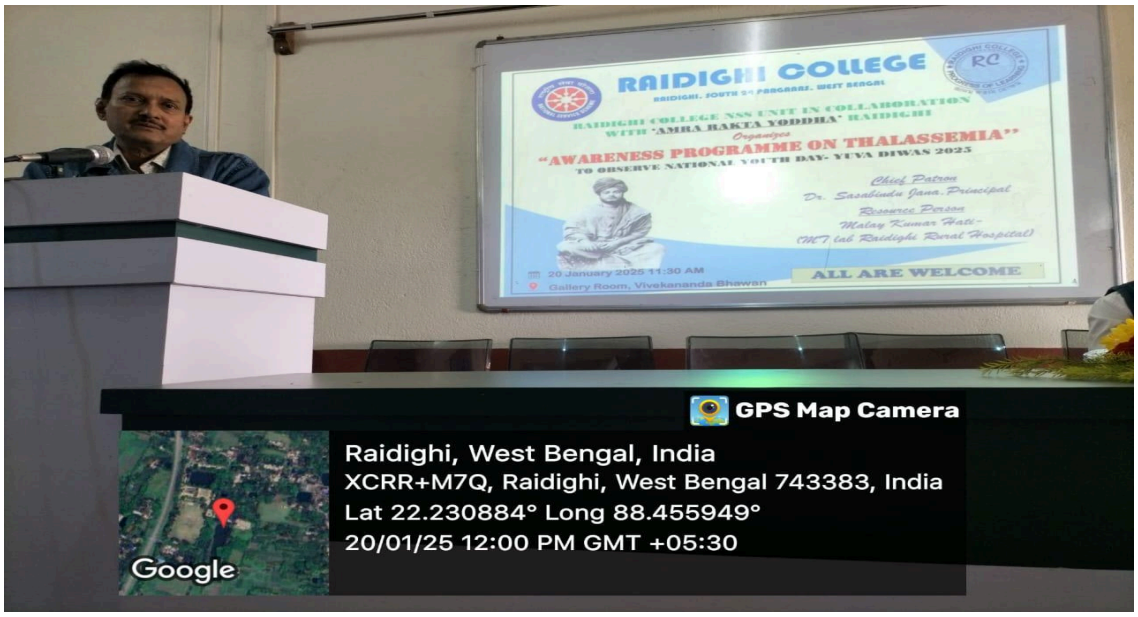

Dr Sasabindu Jana-Principal

Non-teaching staff- Mr Kamal Krishna Khanra

Participants- NSS Volunteers

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Awareness Program On Thalassemia.

20th Janvary 2025. YUVA DIVAS

11:30 – 1:00PM. Venue: Gallery Room.

	Name	Roll No.	Semester
1.	Sudipta Halder	1231167	III
2	Sajan Halder	1231163	III
3.	Hema Mondal	1230812	III
4.	Suparna Midya	1230814	III
5	Susmita Mondal	1231535	III
6.	Anpita Halder	1230927	III
7	Saume Purkait	1230211	III
8.	Subhrata Mudi	1230455	III
9.	Mrityunjoy Das	1231092	III
10.	Subhodip Das.	1230781	III
11.	Manasi Halder	1240032	I
12.	Sutrishna Halder	1241009	I
13.	Sudipa Karmakar	1240754	I
14.	Payel Mondal	1240140	I
15.	Jayashree Bauri.	1241249	I
16)	Dipa Gayen	1230703	III
17)	Sabita Mondal	1230709	III
18)	Bipasha Ghosh	1230540	III
19)	Rimpa Halder	1231479	III
20)	Sayani Bairagi	1230743	III
21)	Shilpa Halder	1230747	III
22)	Suma Pramanik	1230862	III
23)	Aparna Sardar	1230990	III
24)	Anu Mondal	1230995	III
25)	Runa Bhandabi	1230559	III
26)	Himadri Gayen	1240538	I
27)	Soumyadeep Manna	1240002	I
28)	Rajesh Halder	1240260	I
29)	Lappu Halder	1241011	I
30)	Annabi Naiya	1230848	III
31)	Tahamina Khatun	1230941	III
32)	Afsa Khatun	1231438	III
33)	Resmika Molla	1231127	III
34)	Umma Habiba Khatun	1230948	III
35)	Suparna Halder	1231639	III
36)	Puja Mondal	1230318	III

Name	Roll No	Semester
37. Jayanti Rana	1230520	3rd
38. Papiya Das	1230463	3rd
39. Rakhi Halder	1230357	3rd
40. Koyel Halder	1231030	3rd
41. Tara rani Mistri	1231193	3rd
42. Alosi Naskar	1230739	3rd
43. Barsha Singha	1231106	3rd
44 Paramita Gayen	1231107	3rd
45. Kakoli Mallik	1231220	3rd
46. Paramita Naiya	1230865	3rd
47. Kakoli Halder	1230359	3rd
48. Madhumita Kayal	1230438	3rd
49. Pallabi Pramanik	12315 98	3rd
50. Shibsa Halder	1230511	3rd
51. Umasuasi Katal	1230340	3rd
52. Priya Mistry	1230342	3rd.
53. Basumati Kayal	1230007	3rd
54. piya Mondal	1230010	3rd
55. Piyali Haldar	1230331	3rd
56. Rubina Pankait	124 1347	1st
57. Purnima Das	1230503	3rd
58. Paramita Halder	1230051	3rd
59. Pari Mondal	1230515	3rd
60. Sumana Halder	1230516	3rd
61. Nurjana Khatun	1231603	3rd
62. Riduparna Sanpui	1230121	3rd
63. Sakhi mondal	1230125	3rd
64. Sarmila Kayal	1231318	3rd
65. Ishita Mondal	1230760	3rd
66. Debasmita Halder	1230055	3rd
67. Alisha Khatun	123 1527	3rd
68. Shampa Pramanik	1230841	3rd
69. Bishakha Mistry	1230840	3rd.
70. Rima Mistry	1230839	3rd
71. Bhasakati manna	1230837	3rd.

72.	Tanushree Baidya	1230838	3rd.
73.	Barsha Mondal	1230309	3rd
74.	Padmabati Mondal	1230266	3rd
75.	Paramita Sarkar	1230015	3rd
76.	Chandrima Sarkhari	1230052	3rd
77.	Shrabanti Sardar	1230543	3rd
78.	Shikha Majhi	1230795	3rd
79.	Riya Sardar	1230363	3rd
80.	Rupsa Hazra	1230962	3rd
81.	Kakali Bodhak	1230280	3rd
82.	Tanushree Pradhan	1230291	3rd
83.	Supasma Sasdas	1231033	3rd
84.	Tanushri Halder	1230355	3rd
85.	Hassan Paik	1241514	1st
86.	Santanu mistri	1240063	1st
87.	Pranab Halder	1240085	1st

1. P-01 Anuinda Shaw
2. ~~P-02~~ Hamid Iqbal
3. Sital Sen
4. Hamida Rahman Molla
5. Komal Krishna Khanra.