

KUMARI ARIVIAL PERAVAI

YOUNG SCIENTIST PROGRAMME 2014-2015

Training Programme on Medical Science

Govt. Medical College, Asaripallam.

29 /11 /2014



Reports

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- 2.Jefin.R.Wensly.
- 3.Pradheep Narayanan
- 4.Srinidhi N
- 5.A.Malavika
- 6.Abina.S
- 7.P.K.Raghul
- 8.R.S.Raksha
- 9.Sabrina Lynette
- 10.Sree Meera Subramanian
- 11.Dani Rovas
- 12.J.M.Jereshea,
- 13.J.M.Mereshiya
- 14.J.S.Edin Jijo,



1.Gby Atee,
Green Team

After the three hard selection process, the introductory meet held on 26/10.14 at LMS Boys Higher Secondary School, the two days Scientific Awareness Camp on 8/11/14-9/11/14 at CSI Institute of technology, and the next meet at MACET which was excellent, we had planned for our fourth general meeting at Govt. Medical College, Asaripallam on **29th of November**. It was a training programme on medical science which brought so much of excitement within us. ***"Some patients survive because they believe***

in doctors"- Hippocrates. To have a study on the noble profession this programme was arranged. The day arrived and I was ready for the meet.

Kanyakumari is a place which every Indian remembers, as it is placed at the southern tip of India and one of the important tourist spots in India. Nagercoil is the capital town of Kanyakumari District and Asaripallam is about 3 kms away from Nagercoil. Our fourth meeting was arranged at this dignified place **Govt. Medical College, Asaripallam**. It was a spanking new morning with the scent of rain drops and plants all around. I entered the medical college, walking along with Mr. Mullanchery M. Velaian, Shri. Johnson and my friends. I was delighted to be there in that eco friendly college grounds with greeneries all around. It was really a 'poles apart' experience walking on a snail carpet, because the path way to the examination was filled with snails all around. I was early so was helping, to arrange the meeting hall. The hall started filling with colorful KAP members which made me feel contented and blissful.

The meeting commenced promptly at 8:30am without any delay as usual, which differentiates KAP from other organizations. It was strange that the meeting didn't initiate with the Tamil Thai Valzhtu. Anyway it wasn't something to bother and Mr. Mullanchery M. Velaian, the organizer of Kumari Arivial Peravai, asserted that some of the students didn't send the reports within their time limit. We should make sure that the file name of the report includes our name, programme name followed by team name. Our work must be done only in word file. He said about the difficulties he faced to identify the reports and said that we have to do what we can do. We can send our reports to Shri Gopalan or Shri John Rabi Kumar for extra correction. The costal camp will be on 27th and 28th of December. And on that day we have to prepare 500 notices on any one of the topic he gave like:

- கடல் வளம் காப்போம்
- பாதுகாக்க படவேண்டிய சுற்றுலா இடங்கள்
- நன்னீர் வளம் காப்போம்
- பாதுகாக்க படவேண்டிய பொழிமுகங்கள்
- கடலோரத் தூய்மை

He came up with the most anticipated news that is the nest camp on 6th & 7th December att Nambi Kovil and Puliyangudi. The transport facilities will be arranged at Marthandam at 6.30 AM and at Nagercoil at 7.20 AM. He gave a brief idea about what we will do there, like the (**Swatch Bharat**) clean India, learn about the organic farms, and a conference. He ended by listing the things we should take along, on that day like jute sack (for clean India), water bottles and our basic things for a night stay.

Mr. Gopalan the administrative officer of Excel Group of Institutions said the format in which we must write the reports. It is just like this;

He asserted that we should make sure that we spell the names properly along with their position and degree if any. This will be guidelines for any other reports which we would be writing in our future.

Mr. Mangavilai Rajendran, from all India Radio, Nagercoil so called moving encyclopedia the member of KAP stated that this 'Sustainable Environment' topic helps to protect our nature and to carry it for our future generation. The coastal regions around Kanyakumari District are, Arrokiyapuram, Vattakottai, Kovalam and Kanyakumari. It constructed a half of the portion in land and another half portion inside the sea. But now as the sea has gone in the entire portion of the building is in sea shore. It was constructed with the intention of escaping from enemy and for ease of shipping the goods. There the sand is of different color and the rocks are filled with mussels, and lush and thriving green mosses. He didn't tell much about Kanyakumari because it is a well known spot for all of us. Kovalam is a gorgeous spot with rocks all around. He stated that in the west coast, the wave is much vigorous and dynamic when contrasted with east coast, as the wind blows from west to east.

Wave barriers are of no use if water rises in this level, if so in future Kanyakumari will sink just like the Kumari Kandam sunk. The 2004 Tsunami begun at Sumaria. An earthquake raised there underneath the sea which brought the waves at 800 km/h speed and crashing the shore. It won't cause any harm to the sailors who are on their ships but the shore will be ruined. Manakunthu canal once served as a path for ships and during tsunami the water gets into the terrain through this way.

Nature won't harm us in any means. Waves create high sand dunes which is 50 - 100ft. They are a natural fencing to us, and block the wave from ruining province subsequent to it. Screw pine tree (சூழை மரம்) is a tree which has very strong roots and catches hold of the soil very firmly. It cannot be uprooted even by an elephant. This is also a natural fencing and now our generation is going for wave barriers which won't at all work.

He narrated the story behind finding that the black sand is radioactive. Coir was made in Indian coastal areas and the coir was exported to foreign countries during the British tenet. The coir was packed and placed along the shore before embarking the ships. The black sand stuck to it and increased the weight of the coir. Foreign scientists examined the sand and found that it was radioactive. I remembered what my teacher said, the dry fishes that are being dried on the sand is sometimes harmful. The sand doesn't go even after washing and when we eat it, it causes cancer though it is rare.

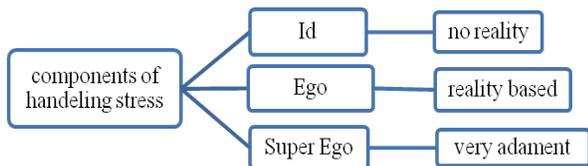
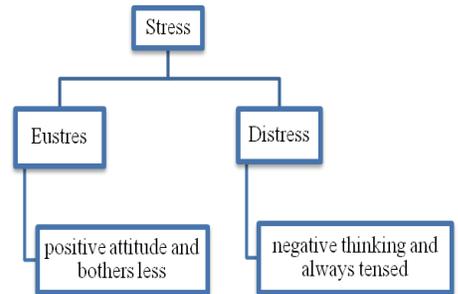
Fisheries are abundant in India because a lot of river drains into the ocean. The mixing of water reduces the salt density and the fish breeding increases. In the Dead Sea there are no fishes because of the high salt density in it. Turtles are scavengers and are endangered now.

He stated that we are blessed as we have land, sea, forest, arable land. As we are near the equator we get copious rainfall. We should have cauliflower type of forest for a good rainfall. He shared one of his experiences at the forest and his superior said that the rain clouds are above the forest in which they were. It is slender

and crystal clear with water in it just like a grape fruit. If the wind blows viciously it will penetrate in, make fissure and bring rain.

Ooty was always soggy with water where ever we march. So to ward off this Britishers planted Eucalyptus which absorbs the groundwater. Rubber is used for erase and now the rubber trees are erasing away our forests. When we Indians starved for food the foreigners gave us free wheat and they gave some drugs along with Parthenium plant in it, which is spoiling our arable land now. Glucose is present in plants but now made synthetically. Israel scientists cut the root tip and scrutinize it and found salts in it. So they created this salts artificially and fed the plants.

He asserted that what we squirt on the plants will be absorbed by them and finally we eat them. The kidney separates the waste material from our body. Too much of salt sticks to the wall of the kidney and it forms a layer, which turns to kidney stone and causes kidney failure. There are 72 varieties of rice and the healthiest of all is the chamba rice (red markings on the rice). The bran or husk of rice was eaten in the past and it controlled sugar and it the food which people enjoyed. We Tamilians not realizing the values of these aren't having the healthy ones and going for unhealthy polishes and shiny rice.



In Kerala taking sand from rivers, rock quarrying and disposing waste in public is proscribed. So the keralites come to Tamil Nadu and unload the waste along the ponds in some under populated areas and is left unaided causing so much of communicable diseases. The people of Kerala are more nature concerned than us. He concluded by saying that we must be aware of all these things and stand against all these evil acts, for a better future. As he was talking I kept on thinking how a person can talk about something for nearly one and a half hour. I remember the proverb "*Practice makes a man perfect*". I believe that I too will become like him at the end of my training with Kumari Arivial Peravai.

Then Dr. Arul Prakash, the Associate professor of Psychiatric, Govt. Medical College Nagercoil and the present president of Govt. Doctor Association Tamil Nadu state. The past state secretary of Indian psychiatric society and the doctor consultant of green team gave his talk on Psychological Aspects of Medicine. He stated that psychiatric is the study of how a mind works. He asked our opinion about what causes stress and, Meera answered it saying doing things properly and punctually prevents stress. He asserted that according to the psychiatrist, being too punctual, too strict is the stress creating one. There are 3 types of personalities, Type A: too

punctual, strict, Type B: relaxed and flexible, we should be both A and B mixed personality, not bothering if not punctual rarely. He also said that, type A is likely to be affected by heart diseases, psychological, and stress problems soon; when type B people are these disease free. He said that:

Ego defense functions in two ways. Immature is a childish way, which isn't reality based and mature is reality based. If we apply mature defense function we can avoid stress. Simple steps to avoid stress are by:

- Good Food : Eat at proper time. Don't miss your breakfast.
- Good sleep : Seven to eight hours of sleep is a must. The growth hormones secrete during our sleep.
- Exercise : Regularly for about 30 to 60 minutes.
- Talk to people : Avoid loneliness

If we follow these we can lead healthy and stress free life, he assured. His talk was very informative. As now in this era, stress management is vital to all, from students till old people, this was very helpful for us to manage our stress.

Then I (Gby Atee) gave a small feedback.

Formal Inaugural function was started at 10.30 a.m I compeered the session from then on. I welcomed Dr. Durai Gunasingh, the Dean, Govt. Medical College Nagercoil, Dr. Jayalal the General Secretary, state IMA, Young Scientist team consultant and Associate professor of surgery, Govt. Medical College Nagercoil, Dr. Arulprakash Associate professor of Psychiatric, Govt. Medical College Nagercoil, the young scientist team consultant and TNGDA Kanyakumari District, and finally Mr. Mullanchery M. Velaian, the organizer and the nucleus of KAP.

Mr. Velaian gave the welcome address by welcoming them and giving a brief idea about the guest. As I was celebrating my Birthday, in the midst of of all and in the presence of the Dean Dr. Durai I cut my Birthday cake which made me feel that I was at my home and really contented and flabbergasted. I thought that this was the best birthday ever with different atmosphere than ever before.

Dr. Durai Gunasingh is the dean of Govt. Medical College, Nagercoil and he basically is a child specialist. He is a very active and energetic person who has contributed several good projects to the medical community. He takes great interest towards students like us and has conducted several academic programs. As Nehru said, "the future India lies in the hands of the students", he has realized the genuineness of this and is taking a lot of initiatives to develop young minds. This renowned personality stated that we must learn and unlearn at times in order to learn. On the campus they do practical learning and learning by seeing and practical will remain in their mind for longer. He also said that, activity based learning (செயல்வழி கல்வி) the initiative of the Government is always the best. He stated that, Doctor is a noble profession and we must respect them. He concluded by welcoming all to the college. His short but influencing talk was marvelous and the importance of activity based learning which my school follows

and me hating it. I apologize for not understanding the significance of activity based learning.

Then Dr. A. Jayalal, the Associate professor of surgery, Govt. Medical College Nagercoil and a laparoscopic surgeon. He was the past IMA state secretary and a dynamic Indian doctor. He is person of knowledge and best suits for us students. He wants his service to be towards the students and he is the Young Scientist's Doctor Consultant of maroon team. This eminent personality alleged that, dean is a lover of nature, and because of him that the Medical College is excelling with its flora and fauna. Two thousand people consult the Doctor here every day and two hundred Doctors serve them. The service provided here is excellent and the secret behind their success is "TEAM", "Together Everyone Achieve More".

There are only 35% of communicable diseases (Which spread) for which Doctors are necessary and 65% of non communicable disease (diseases which don't spread) for which we are held responsible. Cardio, respiratory, Cancer and heart attach are caused by four major evils; alcohols, junk foods, cigarettes and lack of exercise. If we avoid these evils we don't have these problems.

Smoker is a terrorist and he is injured only by 15% and another 85% of the harm is for the bystander. When we see a smoker we should advice them not to do so. If all drunked decide not to drink, then India can save Rs. 2 crore per day. The next killer is the serials and the junk food. We should avoid this and advice others to avoid. This is what I understood from his short and educative talk.

Then we went to the lab study along with Dr. Arul Prakash. In the anatomy museum we saw the skeletons, skulls, hand bones, hip bones, femurs, floating bones and so on, were placed in open. Hands, Legs, Muscles, Feet, Uterus, Stomach, Brain, Liver, Lunges, Heart, very small baby's with undeveloped body party who had died inside the mother's womb, Eyes, Face of Human, Arch of Aorta and all such body organs where preserved in the liquid mixture of formalin acid +glycerol and water. I asked Dr.Lenin why some part of the hand is painted yellow, red and blue. He answered that, it is to differentiate the veins, arteries, nerves and connective tissues, these colors are painted. He stated that once the body part is put in the liquid they won't decay lifelong. The liquid will evaporate and even if we touch the liquid, there won't be any problem (we can just wash our hand).

In the dissection hall Dr. Beno Victor allowed that, formalin +common salt +glycerol used to preserve the body parts. The feedback was given by Lekshmi and previous year's books were gifted to Dr. Benovictor and Dr. Lenin.

Then we moved on to the Forensic Lab in which Dr. Rajesh assisted us. We went around the room and saw the types of suicide knots, weapons, decomposed body images, brine, poisonous plants, drugs, alcohols, skulls, snakes, fishes, and bones. Then Dr.Rajesh stated that, they help the judiciary by providing information about the dead

persons age, sex, injuries, weapons used to kill (is the death natural or unnatural) is it suicide or accident, time of death, is the person left handed or right handed and so on to help judiciary to find the killer. Then Meera, Argeenishya, Edin, Soorya, Raksha, Aglin Bala, Eby Atee and myself Gby Atee asked doubts. Only after brain death, somatic death, cellular death, and tissue death a person is completely died. All these takes a particular amount of time so accordingly they find the death time, was his answer to my question. Jeswini gave the feedback and after the photo session we made our way to the hospital.

First of all we went to a room where white sports from our body are treated using ultra violet rays. Dr. Kannan asserted that, they must wear a spectacle before turning on the light. I and a few students who were in came out for the next batch of students to enter in.

Then we walked into the minor operation theatre after removing our foot wares. It had a really awful smell. Professor Dr. Rajakumar asserted that there are six steps before beginning their work; like washing hands for five minutes, dressing and wearing gloves, I wasn't able to with stand in that place so myself and some of my friends moved out while others where inside the theater.

We walked a long way and reached the Anesthesiology department. Dr. Edward johnson emphasized that the vital signs for being alive are consciousness, pulse and breath. If these aren't there it means that a person is no more. A living brain needs oxygen and glucose but still it can survive without it for the first 5 minutes and the action must be taken within the 3 minutes. In this way we can rewind a person to some extent. Basic Life Support (BLS) can be done by common people and Advanced Life Support (ALS) by doctors. The 3 components we must keep in mind is ABC (Airway, Breathing, and Circulation). If one person has collapsed and fallen down, the immediate initial steps have to be taken by us.

Step 1: Ensure that the scene is safe. **Check responsiveness:** Tap the victim's shoulder and shout "are you alright". If the pulse rate is normal, then there will be some response and there is no problem. Then position the victim. Place him in a hard surface.

Step 2: **Open airway.** Chin lift and tilt head, so that the tongue doesn't obstructs the airway.

Step 3: **Check breathing.** Look, Listen, Feel

Step 3: **Rescue Breath:** cover your mouth over the person's mouth and check for chest inflation. Give two rescue breaths.

Step 4: **Asses circulation:** check pulse

Step 5: **Chest compression:** locate the sternum's lower half for five centimeters. Press 30 times. Allow complete chest recoil between two compressions. Doing chest compression, increase blood flow to the heart. If it is effective it delivers 30 - 40% of blood flow to the heart. Complications if improper are:

- Rib fractures

- Sternum fracture

Give 2 rescue breath and 30 chest compression and continue till the person rewinds.

We shouldn't;

- spray water
- roll the victim
- jump on them
- feed the victim with water

Then Lekshmi, Shri. Edwin Sam, Raksh and Niveth Shankar tried it with a doll human that was placed there. After the feedback by Abina he insisted us one very important thing that, *don't try to do this with all unconscious patients, feel pulse and breathing and then try this.*

We came back and the rain was pouring, even though we walked to the hall. We all were fed up with our walk and our brain was full with information and wanted to have break and fill our tummy with delicious mouth watering food. We stood in a long queue and had the appetizing cuisine.

After our lunch Mr. Velaian once again reminded us about the next meet on 6th and 7th of December. He added that we must bring our breakfast and would be boarding at the PSN College of Engineering.

We had a group discussion with our team members, guide teacher, team coordinator and resource person. We discussed about the topic which our team chose that is 'நன்னீர் வளம் காப்போம்'. There are 2 types of water like hard and soft water was something new to me. In Kanyakumari District there is more good water pond. Vadaseri bus stand was a pond earlier was shocking news to me. Shri Sahajan and Shri Thiruvengadam shared some of their experiences in KAP with us. Mr. Velaian came and said that we should sent mail in our mail id and everything what happened must be included in our report. He also said that the report mustn't be for name sake. He also reminded us to send the thanks letter too.

Then we all gathered together for a common meet and Er. Benziga Rajan had begun his talk. He stated The Tamil Nadu coast is 1074 km long and 24% of the fisher men live in Kanyakumari District it is because there are more fishes. And fishes are abundant here because there are major rivers in Kanyakumari District Thamarabarani, Palazyar, Valliyar and some cannel All these form estuaries and it is the place where a river and a sea meets. As fishes don't lay eggs in salt water they swim in to the rivers and lay their eggs. Estuaries are rare and as it is found in Kanyakumari District fish breeding is abundant. In Kanyakumari District there are 200 different fishes and nearly 16 types of Salmon. He said about the 2 types of shark, the milk shark for women and the baby shark for kids. The 2 types of beaches are rocky and rock less beaches.

He gave some points for the blue team members on their topic 'கடல் வளம் காப்போம்'. For conserving the beaches, one very important thing is providing good houses with proper lavatory so that the beach would be more sanitary. Putting waste in sea will

reduce the oxygen content in the water and kills fishes. AVM canal was for water transportation but now it serves the use of drainage. We must also take steps to control beach sand erosion by having screw pine trees, because wave barriers cannot stop sand erosion or the sand from wearing away. Finally he said that we must avoid catching small fishes, only then breeding and new fishes will be possible. Due to lack of time the meeting ended with the national anthem.

The brightly dressed crowd started melting away and I was filled with happiness of obtaining so much of knowledge. As I haven't been to hospital for years I felt anomalous, anxious and panic. Butterflies were flying in my stomach and I was feeling blue. After the meet I felt that I was a little doctor who will become a graduate soon. I got vast idea about medical science and my fear of going to hospitals reduced a bit. I got a bit more courage and my confidence level has increased even more after compeering the session. Thanks to Kumari Arivial Peravai and my deep sense of gratitude to Mr. Mullanchery M. Velaian for this rare opportunity.

2.JEFIN.R.WENSELY.
BLUE TEAM LEADER.

I am pleased to provide the report of TRAINING PROGRAMME ON MEDICAL SCIENCES. The meeting was started sharply at 8.30am at ASARIPALLAM GOVT. MEDICAL COLLEGE ,NAGERCOIL.The day was begun with the tamil thai vazthu. The introductory address was given by Mr. Mullanchery .M. Velaian (organizer of KAP).In his address he advised that "we must type the reports in a word document.We must send reports of our own efforts.We must not send reports on the web pages.We must get our reports corrected through our team coordinators.We must find our resources. We must listen very keenly". Mr. Gopalan, in his speech spoke about the correct procedure to begin a report.Gopalan sir further added that "we must report with respect to the other persons.We must address the others with their correct degrees that they had learned".

Mr.Rajendran sir said," Kanyakumari district is in the southern tip of our country.Leepuram to Vattakottai was the extend of kumari's sea coast,but now it is from Neerodi to Vattakottai.The first village in the eastern coast of it is Arockiapuram.Algae and mussels grow in the rocks of the sea coast in Kanyakumari.Tortoise is a safeguarding animal.Air is moving from west to east due to which,the western coasts in kanyakumari are having high tides and the eastern coasts are having low tides.Tides are produced by nature.Spending money on trying to stop the tides from exceeding the coastal areas is foolishness.Sumaria is under the sea due to the earthquake that happened below its land area,which in turn produced huge tides called as tsunami.Waves are more faster in the downward region of the sea.Estuaries are the path ways for tsunamis.The sandy layer on the coasts are the natural tsunami defenders.Thazhai tree was a strong tree that staved

in the coasts and saved the soil erosion. When coconut shells were put in the seawater of certain sea in Kumari district, they absorbed the minerals like thorium from the sand there. When ropes made were exported to Britain, they found mineral content of the sand that was attached to those ropes. This caused the taking away of sand from the coasts of Kumari. The Brahmaputra is providing fresh water to the Bay of Bengal. The fresh water condition is very much suitable for the fishes to lay and hatch their eggs. So we must connect rivers to the sea. God created the sea water as salty, by knowing the evil activities of man on this earth. We are blessed to have the proper amount of sunlight and the presence of huge forests to get many rainfall, through evaporation of water and the condensation of water vapour. We must grow trees. Rubber is ruining the sustainable environment. We must get the plants from other countries after the proper information about it. Due to the absence of connection between two ponds, the pond gets dirty. Due to the adding of chemicals in ponds, the fish eats chemicalized food. Thus we eat unhealthy food. Kidney failure is caused due to the disability of the kidney due to over consumption of chemicalized minerals. 72 varieties of rice crops were there in Kumari district. The red coloured rice is controlling cholesterol and diabetes. We must not take away the sand in river areas, as it is the source of water. We must cultivate useful plants, fruits and vegetables in our homes itself. Houses are affecting the sustainable environment in our district. We must create an earth like it was hundred years ago."

Dr. Arul Prakash (psychiatrist), said, Psychology is the branch which deals with the diseases of the mind. Dr. Arul Prakash mentioned that, 'over punctuality causes stress.' Unexpected events and tensions also causes stress. The types of personalities are: type A and type B personality. Type A personality has heart attacks, depressions and other heart problems. Stress is of 2 types: eustress and dis-stress. Eustress propels and guides us to the right way. Mind has three compartments: id, ego and super ego. Id is of fantasy based, ego is of reality based and super ego is the attitude like grown person. Ego defence functions are stopping the ego of our mind and is of 2 types: immature defences and matured defences. We must, be in a positive way, eat good food, have good sleep, do regular exercises and build self-confidence."

Velaian sir welcomed the guests by presenting the books of the previous year programme and said, "Good chances are provided by this college. Utilize it in a good way."

It was the birthday of Gby. Gby celebrated her birthday by cutting the cake in front of Medical doctors and sharing it to all, when the birth day song was sung.

Dr. Durai Guna Singh in his speech said that "Some times we have to unlearn to re-learn. 'Karka kasadara.....' -thirukkural. Practical learning is a life long application. You must get a good experience and a good benefit from this programme."

Gby thanked Velaian sir and requested Dr. Jeyalal (assistant professor of surgery) to give his valuable speech.

Dr. Jeyalal in his speech said that, "medical profession is a TEAM-Together Everyone Achieve More. Communicable diseases causes 33% and non-communicable

diseases causes 67% of death of Indians. We must reduce alcohol, smoking, junk foods. Smoking person gets 15% of the harmful smoke and 85% of the harmful smoke is received by the public. Do not eat more parotas. Consume more fruits and vegetables. The community should help the doctors in stopping the diseases. Health is a state of physical, social, mental and spiritual well-being. Learn well."

We went to the anatomy museum. We saw various parts of the human body like hip bone, arms, foot, soleus-muscle, skull, uterus, fallopian tube, heart, lungs, anencephaly, lens of eye, sternum and brain.

Later we went to the dissection hall. Dr. Lenin, a professor of Anatomy explained that, "embalming is the method of preserving the dead bodies. Formalin, glycerin and salt are added to preserve the bodies. The unknown bodies will be dissected by the college students. Blood is pumped into the body through femur artery. All must study well to become doctors."

We went to forensic lab. We saw the types of knots, images of poisonous birds, plants and animals. Dr. Rajesh, HOD of the Forensic Medicine department said, "we will ask the police to find the age, opinion of drunk, sexual assault and the injuries of the dead persons. During autopsy, we will find the cause of death, to punish or not, weapons that have affected the dead individuals." He cleared the doubts of all of us. Lekshmi sister said the feedback and Jeshwini sister said the vote of thanks.

We went to the hospital. Dr. Prajetha said, "many people have dark pigments on their skin. Haemo photo therapy have the UV lights. It causes proliferation of normal cells of a normal person. UVA and UVB are the two types of rays. UVA have high wavelength. The person getting into the machine will remove their dresses on the places of exposure to the light rays.

Maximum duration of the patient on the machine is 30 minutes. This is psoralen UVA. "Feedback and the vote of thanks was done by Jeshwini and Lekshmi sister.

We went to minor operation theatre. Dr. Raj Kumar said, "minor operation theatre has a staff, doctor, staff room, wash area and a store room. The dress worn by them is called a pre-operation dress. We will wash our hands with soap before starting it. It has a preliminary room. It has an adjustable seating for the patients, hydraulic lamp, mobile lamp, Boyle's anesthesian apparatus, suction apparatus and a monitor. Cautery is used to stop the immediate bleeding in any veins during the operation. Endoscopy is also done during operations."

Next we went to anesthesiology lab. Dr. Edward Johnson said, "a person is conscious, when he is moving. Without CPR irreversible brain damage occurs within 3-4 minutes. To help an unconscious person, we must check responsiveness, open airway, check breathing, breathe and assess circulation for 30 times." He helped us through demos. He gave us chances to try of our own. Lekshmi sister, Edin, Edwin Sam sir tried to do it through the artificial humans.

We had delicious biryani which was provided by the college for lunch.

At 2:30 we had our team meeting. In the team meeting we discussed about report writing, next meeting and about the bit notice which was to be given in the coastal camp. Dr. Benzigar Rajan, ISRO Scientist, gave us guidance, points and ideas to prepare the bit notice.

Later we had feed back session about the experience of the day. Each member from each team did it. Velaian sir gave us the information about the next camp. The training was completed with the national anthem which was sung by every one. They provided us tea before dispersal.

The advantages of this programme are:

I got a overall view about medical sciences. I got chances to interact more with great doctors. I got more advice from the doctors also. I got chances to interact with my team members. It was a highly useful programme to me.

THANK YOU!

3. Pradheep Narayanan
RED Team

“Arise, awake and stop not till the goal is reached”

- Swami Vivekananda

“There are no elevators in the house of Success”

- HH Vreeland

This time, we ventured into an exciting session in Young Scientist programme held at Kanyakumari Medical College & Hospital, Asaripallam at Nagercoil on 29-11-2014. It was the fourth session after a lengthy evaluation process. I made myself ready there by 08:00 AM and the programme began with punctuality by 08:30 AM. The architecture of the institute was elegant and was densely covered with green plants and trees. It was a quite pleasant atmosphere. The medical college, temple of learning and healing is managed by about 200 medical doctors whom we adore them alike God and 400 nightigales, the symbol of love and affection with other supporting staffs..

The faculties greeted us with friendly faces and we got seated inside the examination hall.

The Introductory address was delivered by Mr Velaian, the organizer of KAP to address the gathering. First, he welcomed the honorable dignitaries Mr Gopalan, Mr Rajendran, Mr Edwin Sam and Mr Thiruvencatam to the dais and welcomed all the fellow Young Scientists. He said that the reports should be sent as early as possible and should be done by ourselves and should not seek the help of others. We must have a lot of exposure with KAP and should not be horrified to speak in front of the audience. Everyone must have a good communication skill. Then, we discussed our next meet and schedule.

Next, it was to Mr Gopalan. He gave some of the ideas regarding the format of writing reports. While writing reports, we should also include the position and the doctorates acquired by the personalities. We must not make any grammar mistake while writing reports.

We were very much astonished to hear a lengthy speech from Mr Rajendran who laid emphasis on the Coastal Environment. He said that *Vattakkottai* was built by *Marthanda Varma* in 1744 near the sea for easy transportation and for defense too, but now, $\frac{1}{4}$ of the building is drowned into the sea due to increase in sea level. At present, there is a reduction in quality of sea water. There is a beach named *Kovalam* near *Kanyakumari* which is known for the extraction of salt. Tides occurring in the northern parts are more violent than that of the waves occurring in the eastern parts because the direction of the wind is from west to east. The present-day activities like increase in population, urbanization, utilizing non-renewable resources, contamination of the environment, etc have exploited the nature. The Tsunami which took place in *Kanyakumari* on 24/12/2004 at a speed of over 800 km/h that resulted in huge loss to life and property had occurred due to the collapse of tectonic plates. Another factor is the extraction of the sand dunes which act as natural barrier. Sea sand has a rich content of minerals, but now it is being extracted illegally. God's creation is such that thorny plants survive on the sand dunes so that humans won't dig them up.

Then, Dr Jayalal, the Associate Professor arrived at the hall. I was so fortunate to meet him.

Mr Rajendran resumed his speech. Records and evidences say that there were lots of buildings inside the sea at past. If the density of the sea water is high, then there will be

more fishes present inside the sea. With the increase in human population, there is a decline in marine population. Number of lakes in *Tamilnadu* is reduced from 4000 to nearly 1500. Plantation of foreign crops like rubber, eucalyptus and cash crops induce destruction of animals and other species which are endemic to that region. The major concern is the fast degradation of natural resources. Nowadays, we don't bath in rivers because it is polluted. The effluents from the factories and industries are mixed with the river water. He also threw light on health consciousness. He asserted that remedial measures be enforced for the conservation of nature.

The leader of Green Team, Ms Gby proceeded to address the gathering.

Followed by the arrival of Ms Subatra, a speech was rendered by Dr Arul Prakash, Psychologist who is associated with the College. He asserted that psychiatry is the process of dealing with psychological basis of diseases or the mind-based diseases. Persons who are rigid, over-punctual, strict and arrogant belong to the category of Type A, whereas persons who are soft, not rigid, patient come under the category of Type B. Stress that occurs in positive aspects are called Eusestress whereas the stress that occurs in negative aspects are called Distress which may induce mind-based problems.

To overcome stress and to be relieved from mind-based problems or to make mind positive,

- Think positive
- Self-confidence
- Take things in a soft manner
- Accept failures
- Avoid exposure

There are 3 compartment systems in our mind:

- Id - 5%
- Ego - 35%
- Super ego - 60%

Mind operates certain mechanism for problems known as Ego Defensive function. Metabolic rate decreases and some hormones grow only during night due to darkness. So, we have to sleep at night for at least 7 to 8 hours. He said that every one must have a good communication skill, exercise daily, be physically strong and maintain good relationship with others because man can't live in isolation.

I was so astonished to hear the words of an eminent personality, Dr.Dhurai Gunasingh, the Child Specialist and the Dean of the college who insisted upon practical learning. He said that it is his pleasure to contribute to KAP. He narrated a *Thirukural*

*"Karka kasadara karpavai kattrappin
Nirka adharku thaga"*

Recently, Government of Tamilnadu has introduced a wonderful concept of Activity learning method which paves the way for practical learning. Experimental learning is the efficient method of understanding the concepts with an ease.

Then, the speech was rendered by Dr Jayalal. He talked about the infrastructure of the college, the facilities provided, the management of the college and this is far superior to any other medical college. He gave the abbreviation of the word "Team" as

T - Together

E - Every one

A - Achieves

M - More

He welcomed every one of us. He asserted that Communicable diseases easily spread from one person to another whereas Non-Communicable diseases do not spread. Almost 67% of the people die from Communicable diseases. Cardiac, Respiratory, Cancer, Diabetes are the major diseases.

Causes of increase in diseases are

- Intake of alcohol
- Smoking
- Not doing proper exercises

- Consuming junk foods

15% of the smoke enters the respiratory organs of the person who is smoking and the remaining 85% of the smoke enters the respiratory organs of the person who is standing nearby. If we consume *Idli*, only 60 calories get added to our body while, at the same time, consuming *parotta* adds 800 calories to our body. So, we should try to avoid the junk foods. Then, he narrated a real-life incident that created awareness to one's health consciousness.

Latter we had a visit around the college. I was very curious to have a look over the infrastructure of the college and galleries. First, we went to a museum which contained a lot of art galleries and writings. We were able to see some of the preserved specimens like *porta pedis*, knee joints, skull, skeleton, ear, heart functioning, large intestine, cerebrum, ventricle, born baby, spinal cord, vena cava, encephala locale, bronchioles, larynx, eyeball, ligament and so on....

Although not beautiful, I was interested to see all the internal and external organs of human body.

Then, we reached Dissection hall. One of the Professors said that Embalming is the process of preserving the dead body by adding chemicals like Formalin, sodium chloride and glycerin. If a dead body is not disposed of within the first 9 days, then the body will be taken for dissection.

We were directed in to Forensic lab. There, we could see some of the images on cervical bone fracture, sub-pural HGE, laceration, etc. Prof Raj Kumar explained us clearly about this process. This is the process of examining and giving opinions to police and judiciary. It is examining when the person died, weapons they used for suicide, age of the individual, whether to be punished, what is the cause for doing so, etc. Many students raised several questions for which he answered in a clear manner. I was stunned to see the examined remains and specimens of dead human body.

We also saw the working principle of Physiotherapy. Then, we went to Minor Operation Theatre. It was not equipped in a sophisticated way since it is a minor theatre. There,

they maintain hygiene before performing the operation. They perform minor surgery to the patients.

The next place of visit was another conference hall. Dr Edward Johnson explained us in an elaborate and clear manner about Basic Life Support (BLS). This can be even done by an even ordinary person who is not experienced in medical science. It can be done without any equipment in case any person gets fainted suddenly. BLS principle involves:

- First check whether the patient is responsive or not. So gently shake the shoulders and ask "Are you alright?"
- If the patient is not responding, then he/ she is unconscious.
- Keep his/ her's chin lifted, head tilted and jaw thrust
- Then follow the principle of Look, Listen, Feel
- Give a rescue breath for 2 times
- Then press the ribs with high force for 30 times

His speech was informative. He also showed a video on the theory of BLS which made us understand it with an ease.

Then, we had our lunch at the hall.

After lunch we were split into teams which inculcated a sense of team spirit. We were planning about the next meet and were analyzing the topics given to us. We were discussing our topics with Mr Benzigar Rajan, the Scientist of our team.

After the discussion, it was over to Mr Benzigar Rajan, the Deputy Manager of IPRC who emphasized on Coastal life and environment. He said that several topics along with the themes are given to each team to prepare a notice with full involvement and coordination in order to create awareness to the people residing in coastal region and also for the people dwelling in hamlets. He stated that the total coastline of Tamilnadu is 1074 km. In that, the coastline of Kanyakumari district is just 68 km. But, 27% of the total fishermen in Tamilnadu live in Kanyakumari district because of the abundant demand of fish. Fishes can't lay eggs to give birth to another fish in saline water, so they hatch in a place where the sea and the river meet together known as estuary. He insisted that there are around 200 types of fishes. He asserted that AVM channel was built by Marthanda Varma around

50 years ago. It was built in a way that supported easy water transportation, but now, it is just like a drain with contaminated water. So, technology should be developed to treat the water pollution and he concluded his speech.

Final words were delivered by Mr Velaian. He thanked the College for their prompt management and for providing a lot of facilities. He asserted that there should be proper submission of reports and it should be sent punctually within a week.

National Anthem was sung and we dispersed.

This was truly an exhilarating experience to every one of us. I was so cherished to meet some of the eminent personalities. It was the debut for me to watch the specimens and the dead internal and external organs of human body. I was enhanced with a wide spectrum of knowledge regarding the medical science. Every event happened as per the schedule. I also got to know the clear idea as to how to rescue a person when he/ she has fainted suddenly. It paved the way to recognize the wonderful creations of God. Therefore, I would like to convey a deep sense of gratitude from the core of my heart to Mr Velaian for providing this opportunity.

**4.Srinidhi N
Green team**

"Dictionary is the only place where Success comes before Work"

"Declare the past, diagnose the present, and foretell the future"

- Hippocrates

Kumari Arivial Peravai (KAP) is a non-governmental social organization that aims at identifying talents of 8th standard curriculum and developing them into Young Scientists. It provides opportunity to the Young Scientists to enrich their theoretical ability and also provides exposure to practical systems. During the last several gathering, we had visited several institutes of engineering as a part of improving knowledge in science and technology. During the current session, we had opportunity to visit Kanyakumari Medical College and Hospital at Asaripallam, Nagercoil. It was a unique atmosphere. In this report, I explicate the medical facilities and infrastructures available in the Medical College and how we enjoyed the training program.

Introductory Session

The programme started with on-the-dot punctuality at 8:30 a.m. We were seated in an examination hall waiting for the esteemed presence of the dignified guests. The introductory address was rendered by Mr. Velaian (Organizer of KAP) about the training

program on Medical Science. He invited all the faculties to the dais who were Mr. Gopalan, Mr. Edwin Sam, Mr. Thiruvencatam and Mr. Rajendran. He advised us to send our reports as soon as possible to the concern and we will have to mention our names in the correct format as notified earlier. He also pointed that our work must be completely done by us and we should do it with full involvement. He gave the information about the Study on Coastal Environmental. The Study will be on 27/11/2014 and 28/11/2014. He added that every team has to prepare bit notice on the given topics with the coordination of the whole team. Our team is given by the topic "NANNEER VALAM KAPPOM"(PRESERVE CLEAR WATER SOURCES). Further he added, there will be a camp at *Nambi* temple near *Valliyoor*. The main theme of the camp is to contribute to the Clean India movement and to the upliftment of Organic Farming and Sustainable environment. He explained the itinerary of the camp as well.

Then, it was over to Mr. Gopalan. He also gave a talk about the clear format of writing the introductory part of the reports. He asserted that proper prefix has to be added before mentioning the name of dignitaries as Dr, Mr, Prof, etc. He said that reports are to be treated as archival records so that they have to be perfect.

Then, Mr. Rajendran expressed his thoughts on coastal areas in his speech. He said that KAP further improves the abilities of the leaders of the future. During the last century, the Earth had faced the worst devastation of Aqua life. He described the neighboring coasts of Kanyakumari. Today, even the seaside villages are moving toward extinction. The prominence of *Vattakkottai* is that one-fourth of it has been covered with sea water. But now that level is decreasing. He said that the sand-dunes found in the seashore act as natural barriers. He told that the *Vattakkottai* Sea has low tides when compared to Kanyakumari Sea because the direction of the wind blows from west to east. He deliberated that we should not try to stop waves as it can result in high tides. On 26 Dec 2004, a Tsunami hit the coast of Kanyakumari as a result of an earthquake. It swept through our district with a speed of 800 km/hr. The message he tried to convey was that Environment is always helpful to the mankind. At times of Tsunami, the sand-dunes control the Tsunami waves. The God's creation is such that the thorny plants grow on the sand-dunes to avoid the humans to dig it up, thus saving the biodiversity so as to save the mankind. The elements found on the sand-dunes are useful in the production of Nuclear energy. He narrated a story that revolves around this discovery. The east shore is rich in coral reefs. If we damage the coral reefs, it increases the depth of the sea and thus results in the destruction of coastal life. The point at which the lakes join the sea is rich in the generation of Hydroelectricity. He noted the fact that the Tortoise contributes to the maintenance of cleanliness in the coastal areas. We, the people of Kanyakumari district, are blessed to have forest, mountains, coasts, etc. He told that the plantation of the foreign species like Eucalyptus, Rubber plantation, etc cause deterioration of the species endemic to the region. He advised that we should not dispose of the waste products to the water resources. He stressed that the soil is enriched and replenished

with nutrients due to the Earthworms and Bacteria. So, we should not use artificial salts to the soil, thus killing those organisms. He concluded his speech by his words **"Let us recover our lost resources"**.

Ms Gby Atee, leader of Green team compeered the programme. She welcomed all the dignitaries on the dais including Dr. Durai Gunasingh, the Dean of the College.

Speech on Psychology

Dr Arul Prakash, Psychologist of the hospital, gave a vivid speech on Psychology. He emphasized the fact that excessive perfection leads to tension. The points he listed were:

- Don't be too much stressed.
- Stress is of two types: Eustress (positive) and Distress (negative)
- Type "A" personality gets too much stressed, which may result in stress-induced medical problems. Type "B" personality will be flexible.
- One's psychological condition can be divided as Id, Ego, Super ego

He listed some of the remedies to handle stress. They were:

- Play often
- Do exercises for at least 20 minutes a day
- Be self-confident
- Inculcate the practice of having a good interaction with others

His talk was very informative.

Dean's Address

Dr. Durai Gunasingh, the Dean of the Medical College said that it is a good opportunity for all of us and to make use of the opportunity. He insisted upon the concept of practical learning which will be helpful in medical science. He defined it as "In medicine, we have to unlearn to relearn". He told that the administration of the College is aiming at making the College a Biodiversity spot. His speech cherished my ambition of becoming a Doctor.

Talk of Dr. Jeyalal

Then, Dr. Jayalal, Doctor of that College, gave a talk. He asserted that they are making efforts to release a CD on the flora and fauna of the College. He informed more than 2000 people visit the hospital daily. He told that Diseases can be divided into communicable and non-communicable diseases.

The main reasons that he stressed as the reasons of the diseases were:

- Practice of alcohol intake
- Practice of smoking
- No exercise
- Addicted towards junk food

He told that only 15% of the smoke enters the inner organs of the person who smokes and the remaining 85% of the smoke enters the respiratory parts of the people around them, thus affecting others also.

Further he gave the definition of Team and its abbreviation as

"Together Everyone Achieves More"

Field Visits

Then, we moved to visit Anatomy museum of the college. There, we saw various parts of the human body stored in jars filled with Formaldehyde and Sodium Chloride. I was very much interested to see and investigate about various parts of the body after dissection.

In the gallery, we were able to see the bones, skulls, ribs, hip bones, structure of nose, nasal septum, Brain, Postero of the kidneys, liver, etc.

We could also learn about several methods of preservation of the dead bodies.

Then, we went to Dissection laboratory where Dr. Lenin gave explanation on preserving the dead bodies. Ms. Lekshmi, former Young Scientist gave her feedback. We went to a hall where we saw more pars of poisonous plants and animals. The doctor explained about the techniques of how to dismantle the bodies as well as how to find the cause of the death, time after death and examining injuries, health problems, etc. Ms Jeshwini, another former Young scientist gave her feedback this time.

Then, we went to place where treatment will be carried out to cure Lecodermia using ultra-violet rays. We had a visit to a place where there was a presentation on the recovery of a person when fainted. Dr. Edward Johnson and Ms Dhanalakshmi presented a demonstration and a presentation on the theme. We were also given to understand about some interesting facts about the brain.

Final Session

After field visit, we returned to the examination hall and had lunch. After lunch, we had a group discussion at the place and were discussed about the next meet and about the preparation of pamphlets.

After the group discussion, Mr Benzigar Rajan spoke about the water resources. The coastline of Kanyakumari exceeds 65 km and 26% of the fishermen's livelihood depends on this coast.

He listed the main five rivers of this district. They include:

- *Thambravarni*
- *Valliyaar*
- *Panthriyaar*
- *Palaiyaar*
- *Paampaar*

He stressed the fact that the fishes lay eggs in fresh water. Nowadays, humans are the main cause for the tortoise to lay little eggs. He also said that toilets have to be properly implemented in the seashore areas.

As this was my first visit to a Medical College, I felt very much blessed to have been provided with such an opportunity. After the visit, we could realize the fact that human body is an astonishing collection of several complex processes, all of which work in

unison and perfect coherence to discharge their intended functions effectively. The programme was organized in a perfect manner as per the schedule with an opportunity to visit some of the unique and rare facilities. So, I convey my sincere and deep sense of gratitude to KAP and its organizer, coordinators, former and the present Young Scientists.

5.A.Malavika
yellow team

The programme was started at 8.30a.m in the examination hall. At first, Mullanchery.M.Velaian sir gave an introductory speech. He stated about our report writing and he also said, what are the mistakes we are doing while writing the report. Then he emphasized, about our next programme and he also emphasized, that every 5 teams, should make tips from that topic. The topic is "CLEANING OF SEA SHORE" and he said, our next programme was on next Saturday and Sunday. Then he said whatever things we should bring for our next programme.

Mr.GOPALAN

Then Gopalan Sir also stated that, what are the mistakes we are doing while writing the report. We are not writing our name, so that they could never find who send those reports. So, by our carelessness, we are making such mistakes. Then he stated that, we are not giving any respect to Sir or Madam, while writing the report. In respect, we should write as Dr..., Sir..., Mam..., etc.

Sir.Mangavillai T Rajendran:

He stated about Vadakarai, and it starts from Arokiyapuram and ends in Neroadi and in vattakottai.A king named "MARTHANDAVARMA", he ruled Vattakotai and during his time he built a fort there. There are many kinds of sands in vattakotai and there will be many rocks and in those rocks there will be many shell, sea algae and in Vattakotai, there was a light house, which helps the sailors to sail on the boat in the night, and there is another one speciality, that before some years ago, a boat was dropped inside the sea. Since, now we could see the flag of the boat in vattakotai. And in vattakotai, we can see many Tortoises and also we find Tortoise in muttam. In olden days, we can find all animals in Kanyakumari, but now all animal species are in the verge of extinction. Since, nowadays Tortoise was mostly killed for purpose. By killing Tortoise, people have one demerit that, nowadays people are putting all the waste materials in the rivers, since the rivers will end in the sea and so all the waste particles in the rivers are

joining in the oceans, but if the Tortoise be in oceans, it will eat all the waste particles and it will keep the ocean clean and tidy. But nowadays, people have destroyed many Tortoises and now there are only few Tortoises, so all the sea water gets eroded. In Kovalam, there are many uppalam, so we can take many salts from Kovalam. In olden days, in the sea shore there will be many white sands but nowadays, people are keeping stones and destroying the sea shore. Then he emphasized that in eastern sides, there will be very less waves because air blown will be less in these sides, but in western sides there will be huge waves, because air blown will be high in these sides. The wind direction is from west to east. Waves are generating due to Air. Sir stated that before 10 years, he went to Thankapattinam and he saw many coconut gardens there. Then after 10 years, he went there and saw the same place but now there were only two coconut trees. He was shocked by seeing this wonder. Because of cutting trees, the water forward to the land and we can also say cutting of trees as a crime and it is also called "DEFORESTATION". Then he said about Kumarikandam, it is really an auspicious place, because people are originated in these Kumarikandam. He emphasized that on 26 December 2004, Kanyakumari was affected by Tsunami and Tsunami affects Indonesia because, Earthquake was originated, 16000Km under the sea and the speed of the waves is 8000Km and the Tsunami affects Kanyakumari District. He also said that people inside the ocean cannot identify the Tsunami, if occurred or not. He stated an example for this that is in Kanyakumari district in Mandaikadu beach, EX-Minister and present MLA Mr. Pachaimal went inside the sea on the boat, but he doesn't know that Tsunami occurs at that time of reach in the sea. But the EX-Minister and present MLA Mr. Pachaimal was safe and he does not affected by Tsunami. When he went near the seashore, he saw many dead bodies and many things floating in the sea water. Then he saw his car floating in the sea water and he felt bad. Tsunami will not come from the upper waves, but it is originated under the ocean and the waves will be coming under the oceans. When the Tsunami occurs, it will join with the rivers and it will go back to the oceans. On the Tsunami day in Chotthanvillai, Tsunami affected heavily but one man was in the top of the palm tree. Sir asked that man, what happened Sir, and he said that Tsunami had occurred here, many vehicles and human beings had gone inside the oceans and he said that I had escaped from the Tsunami, so from this we can understand that if we are in the higher position like if we are in the top of the tree or in the certain height we can escape from Tsunami, but since it is not sure, it is a required safety for us. Then he stated about Thalamic tree, an Elephant cannot destroy or break this tree, because that tree is very strong. In clay soil, we can take costly materials like Zircon etc. He emphasized that before in 1786 October 26, Kanyakumari was affected by Tsunami. He said that, when Tsunami affects Kanyakumari at that time the waves went inside the sea and at that time people in Kanyakumari saw a building inside the sea, in that building they saw a copper door, then Kanyakumari people thought to go near to the building but the British Rulers said that the water must come forward, and while so if you are going in to the sea, and if

the water comes forwards what will you do? Asked by the British Rulers, so the mad person of Kanyakumari does not go inside the sea. In 1984, when Rajendra sir went to Kanyakumari he asked some elders, is it true or not. Is any building is found inside the oceans, he asked them, at that time they said yes it is true, it was found inside the sea. In Kanyakumari District, we are having many Mountains, Forests. Because of those Mountains and Forests we are getting rain and 20% of Sunlight and it is coming towards the sea and it is evaporating and then it is coming back as rain. When both the rainy clouds are dashing each other, drop of water is falling from the sky, that is called the Rain. Then he stated that in Ooty, before the period of British, there was full of water, but when the British ruled Ooty, they planted a new tree that is called "EUCALYPTUS", this plant is used to absorb all the water and nowadays there is no water in Ooty but the foolish people in Ooty, they are thinking that Eucalyptus is used to cure Headache, so it is very useful to us. Not only the people living in Ooty using this, but every people all around using this Eucalyptus to cure Headache. Rubber is also not an Indian tree; it is taken from some other countries. Partheeniam is a poisonous tree; it is also not found in India and it is taken from some other countries and now it is widely found in India. Sam raj, a Scientist, did Research about this poisonous plant, he had died because of the poison in the plant. A few years ago, we can see many fish, earthworm in the Agricultural field, but nowadays we cannot see all those in the field, because of the growth of plants we are using many poisonous materials so all these poisons are affected by animals and they were died. In Kanyakumari, we are cultivating 72 varieties of rice, from these chamba rice is very good for our health. In olden days, people are using these rice and so that they are healthy. Nowadays, in Kerala they are using this same rice both in marriage functions and in their own home. From Andhra Pradesh, rice is coming to Tamilnadu and these rice are polished and this rice has only the starch, so while we are eating this rice our sugar will be increased. We know that in Kanyakumari there are many mountains and the people are breaking all these mountains and they are destroying. But near to Aralvaimozhi, if they dig the soil we can see many rocks inside the soil. From the rivers, peoples are taking many sands, so by taking all these sand we are not getting any water all these have been stopped in Kerala. In Kerala every birds are getting, viral fever. In Kanyakumari we have an able soil to cultivate vegetable, but we have some model plants in home and we are wasting our money to buy vegetables, but in Kerala the soil is not fertilised for cultivating in their homes to save money. At last he said that people are destroying the water by putting the wastes inside the fresh water and they are also destroying the land by burning plastics, putting all the wastes in the roads etc.. So we should be very careful and we should keep our Environment clean.

Dr. ARULPRAKASH

Psychologist in Asaripallam Medical Hospital

Psychiatrist is a branch of science, which deals with the disease of mind. He stated that if a person is very proper in punctuality then he will get tensed, this is said by Psychiatrist. Due to over punctuality, heart attack will be occurred. There are two types of personality they are

1. Type A
2. Type B

Type A includes police officer, Business man etc... Type B includes civil peoples. We should have both A and B characters. There are two types of stress they are

1. Eustress
2. Distress

Eustress include positive stress and Distress includes negative stress. When our exam starts we will have a little amount of stress that is called Eustress, but when the timetable comes we might have more tension and our heartbeat will be increased that is called Distress. Then he asked how to overcome stress?

Handling the stress is done by mind. There are three types they are Id, Ego, and super Ego. If we are thinking to hit a person, for relaxation we should hit a ball first, so by hitting the ball our anger will be reduced and we will not get any stress. Then he stated about positive thinking for getting positive thinking, we should eat healthy food and we should take food in a regular time. He said that most of the school students will not eat breakfast .We should sleep up to 7-8 hours ,even grown up peoples they should sleep up to 7-8 hours. When the sky is becoming dark, then in the dark night our hormones will starts to grow, and some other hormones it will starts growing only in the night time. Every people should have good and adequate exercise. We should do some personal exercise like skipping, joking, running etc, we people should do this exercise everyday and we should do it for one hour. At last he emphasized that every people should do exercise daily.

Then Mullancherry M Velaian sir gave an introductory speech.

Dr. GUNASINGH:

He emphasized that this is one of his great pleasures to talk in this programme. Then he stated that in his childhood stages, he does not get any chance to express his thoughts, he just mugged up everything. He stated that activity based hearing method is introduced by the government of Tamilnadu, he appreciated this scheme and he wished all of us to study well. At last he said, in medicine we should learn or unlearn to relearn.

Dr. JAYALAL :

He said that no other college will have trees like these. Nearly 2000 people are coming to Asaripalam hospital and 30 surgeons will be held in the hospital. Then he said the expansion of TEAM-Together Everyone Achieve More. Then he stated that there are two types of disease, that is communicable disease and non communicable disease. Communicable disease will spread from one person to another person, but non

communicable disease does not spread from one person to another person. About 67% of people death is based on non communicable disease; only 33% of deaths are based on communicable diseases. If we avoid eating Trunk food, drinking alcohol, and smoking and if we are doing exercise daily we can prevent such diseases and we can escape from the death. If a man is smoking, nearly 15% of smoke is going inside his body; other 85% is going to other people who are near to the man, so they may get some heart diseases. For a day in Kanyakumari, we are getting 2 crore Rupees by selling the alcohol. In parota, it has 800 calories, in Egg, it has 100 calories and in Apple, it has 60 calories. At last he wished for our bright future. Then we went to Anatomy museum, in the museum we saw upper limb, Skull bone, abdomen, head and neck, Brain, Thorax, Heart and we saw the coastal surface of the lungs, eye balls and the eye ball lies in the Anterior part of these orbits, there we saw many small babies, since it was not alive and the babies are in the mother's womb, and we saw all the stage of babies, Then we went to dissection hall, Dr. Dannel gave a very good explanation about dead bodies, he said that first the dead bodies will come from the mortuary, they will take the dead body from the mortuary after a days and they will take the body to embalming to preserve the body. In the last stage they will give blood to the dead body by the veins. Then we went to for and Sick department. Justice is nothing but true in action this was written in that hall there we saw many types of fishes like Gold fish, Eel fish, Locoed the other name of this is Wolf Snack and there we saw many types of Snakes .We saw many varieties of ropes like how the people will hang in the ropes. Then Dr. Rajesh explained about the bodies which died due to accidents, hanging in the fans etc, and in Tamil this department is called sat tam sarentha maruthuvam. If a man is under the death, his brain may attain the death first .Dr. Kannan explained about ultra violet rays, then one mam came to explain about this rays. Then he said about HIV and the ultra violet rays are used to cure the skin problems. Then we went to theatre room. Dr. Rajkumar explained about over head lamp, shadow less lamp, boiled super stress and this is used to make anesthetics, multiparameter, endoscopy. Sigmoidoscopy and in this room feedback was said by Resume . Then we went to the department of Anaesthesiology. Dr. gave a clean explanation about an unconscious person .Then Dr. Edward Johnson has asked to us how will you find a person that if he/she is in unconscious condition? We should gently shake his shoulder and ask loudly are you alright? If he is not replying the answer, we should do first aid. There are three types to maintain the air that is

1. Jaw thrust
2. Head tilt
3. Chain lift

Breathing is the second basic skill .We should look for the chest movement and we should listen and feel. We should turn the patient to the recovered position .We should depress the chest for 30 times and we should breath with our mouth for 2 times if the man lungs is functioning properly, then the man is safe. For unconscious person, we should see the

pulse in the heart. There are two types of air wafer, they are BLS and ALS. In ALS there are two types they are ACLS, ANLS.If a person is in critical position within 3-4 minutes, and the brain will get damage. At last Bensingarajan gave a speech in that ,he said that the total distance of sea is 1074Km from that in Kanyakumari, we have 68Km.26% of fisherman's were living in Kanyakumari ,because we have many varieties of fish .Estuary is a place where the sea and river water meets. In chelae fish, there are 16 varities. From Rajakamangalam to pariakadu, we can see many tortoise .He said that nowadays there are many coconut trees in the sea shore. Then he stated some tourist place like Kanyakumari ,mutt am ,chothanvilai .In this sea shore there are many rocks .AVM channel starts from Mondaikadu and ends in Kovalam. At last, he said that there are 200 varieties of fish in Kanyakumari District and finally we had coffee and the programme has come to an end.

I am thankful to KAP for arranging this programme.

**6. ABINA.S
RED TEAM**

"Medicine is not only a science; it is also an art. It does not consist of compounding pills and plasters; it deals with the very processes of life, which must be understood before they may be guided."

-Paracelsus

The Asaripallam medical college had some unusual visitor on 29th November, 2014 as we the young scietists of KAP just entered inside the campus. The five teams in five different coloured uniform looked like five different petals of the single flower KAP. The KAP clocks always ring the bell in the correct time when Shri. Velaian occupied the stage to invite, welcome, intorduce all the dignitaries by sharp 8:30 am. Mr. Velaian (Organizer of KAP). We had a large contigent of members from KAP as well as doctoors from Asaripallam Medical college. They include,

- + Mr. Johnson
- + Mr. Edwin Sam
- + Mr. Gopalan
- + Mr. Bala Krishnan
- + Mr. Rajendran(All India Radio)
- + Dr. Jayalal (Assistant professor of surgeon)
- + Dr. Arul Prakash(Associate professor of Psychology)
- + Dr. Durai Guna Singh(Doctor government collage)
- + Mr. Shahajan
- + Mr. Benzigar Rajan
- + Mrs. Krishnakumari
- + Mrs. Jayakumari
- + Mrs. Rathika
- + Mrs. Subhathra

The highlight of Shri. Velaian's address was mainly about report writing and sending it in time. Writing our own names, timing, venue, seeking our teachers or co-ordinators help, avoiding net centres to the extend possible, the important points, subjects taught, and the benefit which one had got during the programme should be written.

Shri.Gopalan who followed him also gave some tips to write the reports. The main point he again insisted was about mentioning the name and also the main thing he stressed was to write the positions of the chief guest in the report than simply writing their names.(Ex: Dr, Mr.....). He said as to avoid grammar mistakes and write a proper conclusion on what you gained and finished his speech.

Then it was the time for us to listen to Mr. Rajendran(All India Radio) . He started his speech with the topic sustainable environment. *"WE MUST SAVE OUR ENVIRONMENT FOR THE NEXT GENERATIONS."*

Kanyakumari district is surrounded by land and water masses in all sides. Sea plays a vital role at present. Vattakotai was built by king Marthanda Varman in 1940.This place had a link with sea in earlier times. Vattakotai sea sand is of different colours. The sea has rocks and shells in it. It also contains many organisms. There is a light house which is helpful for the fisher man. There are many turtles in this area and this animal is a protected one. Then about Kanyakumari which is familiar to all of us and then Kovalam one of the tourist sites in south India. Kovalam is a beautiful sea. The waves in Vattakotai are not very forceful but the waves in another seas are forceful. Vattakotai doesn't has forceful waves. Air is an important factor responsible for the formation of waves. Before ten years there were lots of coconut trees at Thengaipattanam but now there are no trees as the sea water entered that area and coconut trees are unable to grow due to some factors. So the trees are useless and people cut it. There was tsunami at 2004 the day after Christmas that is 26th December. Thousands of people died .Tsunami was caused due to the quake in the sea bed. Then he narrated a story to show the difference how tsunami is caused due to quake. There are many sand dunes. Punnai Tree is the original and natural plantation in sea. There are two kinds of punnai tree. Then another tree known as thalai tree is a strong rooted tree which can't be even destroyed by elephants. We can see more holes dwelled in sea shore which is used to store the fibrous outer covering of coconut which is used to make twins. Sea sand has more minerals in it. There are many buildings under the sea which are buried due to natural calamities. Coral reef is the house for fish. Sea turtles can help in cleaning the sea shores. There were more crabs in olden days. There is more difference between olden days rain and present days rain. We are destroying all the trees for our purposes. He said a story that once British came to ooty the area was swampy so they planted a eucalyptus plant which is responsible in sending the water up . Eucalyptus is a bad plant and at present we use it as a medicine. Olden days we can see fishes in the clear pond waters but now due to contamination we are not able to see any fishes. About health most of the people are affected with diabetes and blood pressure. It is all due to contaminated and poisonous

food. Nowadays ground water is damaged and even the mountains are damaged for rocks. Nowadays a disease called birds fever is spreading through hens waste. For improving our health we must grow vegetables and fruits and have it. Finally he finished his speech by mentioning the evils we do against nature and hurt ourselves and nature.

Next it was the chance given to Dr. Arul Prakash (Psychologist) to share his ideas with us. Psychological problems are the disease in mind. Too much punctuality, orderliness, rules can lead to tension. There are two types of personalities A,B. Type A are tension person and B are flexible persons. Stress is of two type EU stress and distress.EU stress means positive stress but distress means over tension. Handling stress is done by our mind. There are two compartment sections they are

- 🌻 ID=no reality (Childish)
- 🌻 EGO=has some reality(Teenage)
- 🌻 Super EGO=not in a good condition(Old)

EGO defects in two functions:

- ✓ Immature=ID
- ✓ Mature=EGO

Positive fundamental tips are:

- Positive mind
- good food
- eat in proper time
- good sleep(7-8 hours)

Good sleep for 7-8 hours can relax us from our busy schedule and decreases stress. Good sleep can help in the growth of our body. *"GOD CREATED DAY TO WORK,NIGHT TO SLEEP"*. Finally he spoke about exercise and stopped his speech.

Then Mr. Velaian gave a welcome address to all the doctors who arrived during the time and ended his speech.

Then we had the birthday session of Gby Ate, the leader of green team in front of eminent personalities. We were anxiously waiting for Dr.Durai Guna Singh, the chief guest of the function as he was invited to give his speech. He welcomed all of us. KAP is training all of us in medical science. When he was studying in schools they were not taken out of the school. Nowadays marks design our future. But according to medicine it is not sure. We must learn but trying to apply it is very important. Now at present government has established activity based learning. In this hospital there are 200 doctors and 400 nurses and many more staffs. And he finally wished us to have a good time in this program and concluded his speech.

Then it was the chance of Dr. Jayalal to give his talk. He said that this collage is ten years old college with more trees, birds here as they preserve nature. 2000 people visit this hospital for treatment daily. Each day 30 surgeries are done here. They always work in TEAM which means:

- ❖ T=Together

- ❖ E=Everyone
- ❖ A=Achieve
- ❖ M=More

Diseases are of two types communicable and non-communicable. In India 67% people die due to non communicable diseases and 35% die due to communicable diseases. A doctor can only cure communicable diseases . Non-Communicable diseases are

- Cardio problem
- Respiratory problem
- Cancer
- Diabetics

The reason for cause of non communicable disease are;

- Alcohol
- Smoking
- Lack of exercise
- Junk Food

15% of smoke goes inside the man who smokes and 85% of smoke goes to the nearby person. *SMOKERS ARE TERRORISTS.*

Two crore rupee is spent in Kanyakumari district to drink alcohol. His speech reminded me " The best doctors in the world are Doctor Diet, Doctor Quiet, and Doctor Merryman". Finally he wished all of us to live a healthy life and concluded his speech

Then we had the LAB STUDY session. First we went to the anatomy museum. The things I viewed there are as follows which were original and not artificial:

Bones, Leg of male and female, Hand and section of it, Foot, Intestines, Kidney, Liver, Urethra, Uterus, Heart, Section of heart, Lungs, Arteries and Veins, Aortic arch, Twin hilus, Abdominal wall, Eyes and its parts, Larynx, Ear, Ribs, Brain, Skull, Stages of a child

And many more things we viewed there . Here we were guided by Dr. Lenin and Dr. Vino Victor. They explained all the steps from getting the body and disposing it. Lekshmi (former Y.S) gave the feedback of this session.

Then we went to the department of Forensic medicine. Here we were guided by Dr. Rajesh. He said that they will help the police by giving some opinion. They will find the age of the person by examining their bones. They can know the cause of death by postmortem. We can also know natural or unnatural death, used weapons for injuries etc...Bones of female has less weight than males. If a dead body is in an open area then it can decompose easily. If the body is buried then it takes 2- 3 weeks to decompose. If kept in coffin box it takes more days. During the death first the brain dies then clinical death and finally cellular death and after 8 hours tissues die. Then we asked few doubts and they cleared all our doubts. Jeshvini(Former Y.S) gave the feedback for this session.

Next we went to Phototherapy room. Here we were guided by Dr. Prajjera. Here we were shown a machine which was used to cure the skin problems . The machine was

called as PSORALEAN. She explained about the functioning of the machine which contains long tube lights. Here the feedback was given Lekshmi.

Then we were allowed to view the Minor Operation Theater where we had Dr. Rajkumar to guide us. The theater dress is known as Apron. There are six steps to clean our hand. In the theater there is a overhead shadow less lamp. Medicines responsible to make a person unconscious, Multiparameter, Cautery and endoscopic were some of the instruments which we could see there. Here Reshma, leader of maroon team gave the feedback.

Then all of us went to the department of Anesthesiology. Here we were guided by Mrs. Thanalakshmi, Dr. Edward Johnson, Mr. Dhibin.

Here we saw a power point on how to recover a person after fainting. He said about how it is caused and how to help the steps are:

- 🌈 Gently shake the shoulder and ask are you all right ?.
- 🌈 Then lift the head, chin lift, jaw thrust and maintain breathing.
- 🌈 Look, listen and feel.
- 🌈 Turn to recover position
- 🌈 Rescue breathing
- 🌈 Ensure head lift, chin lift, pinch the nose and effective breath.

Then he said some remarks on it and showed two videos explaining what to do and not to do when a person is unconscious and then the feedback was given by myself for this session.

Then we came to the hall and had our lunch and Mr. Velaian once again said about the next program and then finally we had our group discussion about the next program and about the topic and work.

Later we all assembled for the final session Mr. Benzegarajan gave a short talk on all the topics of every group.

Finally we sang the national anthem and the program finished. KAP had really given us an excellent opportunities to visit and gain more thing on medical science. All of us really had a good time in the campus and gave us all a good platform. Thanks to Government medical collage and I bow in front of KAP for its hard work .Thanks to one and all.

7.P.K. Raghul
Yellow Team

With a lot of happiness I entered the campus of Aasaripallam Government Medical College. The place was blessed with nature's beauty. The meeting started sharply at 8.30 am in the examination hall which indicates the punctuality of Kumari Arivial Peravai. The meeting was about " MEDICAL SCIENCES ". I liked the topic since my aspiration is to become a doctor.

Mr. Velaian, the organizer of KAP, told us about the preparation of a proper report. He also indicated the mistakes that we have committed and told us to be more vigilant in

future. Then he informed us about the coastal study tour which will be held on December 27 & 28, 2014. He continued that it was a team project and topics are as given below;

- Save ocean resources.
- Protect pure water resources.
- Tourist Places in Kanyakumari
- Good sanitation in seashores.
- Ports in kanyakumari district

It is also planned to conduct another camp on December 6 & 7, 2014 which is based on Organic farming, Sustainable environment and Clean India Campaign. All young scientists are asked to bring sacks to clean the Nambi temple, Tirukarungudi and we will stay at Kings Matriculation School. We will also visit a place in Naanguneri to know about organic farming. At last he concluded by saying that every one of us should be active and join in all the activities. I told myself to follow the words of him for development of me and others.

Next Mr. Gopalan, the Yellow team coordinator, continued with his talk. He gave ideas on writing good reports and insisted us to write the name of the person with his qualification at the beginning. He also said that we should write a person's occupation after mentioning his/her name. Writing conclusions can create good impression of us on the reader and thus he ended his noble speech. I got a clear idea about writing a report.

Soon Mr. Mangavilai Rajendran, Programme Executive All India Radio Nagercoil came forward and began by appreciating KAP for selecting such a wonderful topic (Sustainable environment) to the students because according to his opinion students are the righteous persons who care for the nature. His speech mainly focused on Kanyakumari Sea and its surroundings. He described each seashore starting from the east to west. The first eastern coastal village of Kanyakumari district is Vattakottai. It was built in 1740 by the King Marthanda Varman. One of its main tourist attractions is the fort of Vattakottai. Records suggest that it might have been built for the easy transportation of goods from Vattakottai to different parts of the world through the sea. This proves the occurrence of trade in those days. It is also believed that the fort was built to attack the enemies and to take shelter inside. Important things present in this coastal village are sea shells, sea anemone, sands of various colours, mosses, etc.,. Leepuram which lies next to Vattakottai is well known for its lighthouse. It is about 40 feet tall and is lighted by vegetable oil and is used in the olden days. Tortoises are found in abundance here. Going further west we can notice Arokiapuram & Chinnamuttam which are well known for its fishing industry.

Next lies Kanyakumari which is an important tourist destination of India. It is also known Cape Comorin. It is the south most tip of peninsular India. Since this district is situated at the extreme south of the Indian subcontinent, the coastline is formed nearly by three seas, namely, Arabian sea, Indian ocean and Bay of Bengal. Kumariamman temple, Vivekananda rock, Thiruvalluvar statue, Gandhi mandapam and Kamaraj mandapam are viewed by thousands of visitors from all over the world every day.

It is believed and proved that there was a land mass which lies beyond India towards south. It is known as the Lemoria continent. It would have gone into sea by natural calamities like earthquake, tsunami etc., The word tsunami is derived from the Japanese word which means " Harbour wave ". On December 26, 2004 tsunami was due to an earthquake that occurred inside the sea area near Sumatra. It had a speed of 800 km/hr. The effects were tremendous. A lot of people died while others lost their properties and relatives. This can be prevented by the barriers made of sand on the seashore. This is a creation of nature. But we foolish humans destroyed it for the sake of minor enjoyment. Thus tsunamis cannot be prevented by artificial barriers made of cement and stones as it cannot withstand the force of water during tsunami. In 1883, a tsunami hit the coast of Kanyakumari. However it did not cause any extreme damage because at that time there were natural sand barriers.

Kovalam lies to the west and is known for salt production. It has also a beautiful beach & seashore. Fishing is also done here. As the winds are blowing from west to east, the tides are fast and high in the western seashores like Kovalam while the eastern seashores experience low and slow tides as in Vattakottai. Abundant of minerals are located in our seashores like Silicon, Monoxide, Chromium, etc. The seashore of Manavaalankurichi is known for its various minerals. In ancient days, there was a famous rope producing industry and ropes made here are sent to other countries. One time the ropes were exported and were kept in a storeroom. When the ropes were taken out the people saw the sand consisting of various colours. A team of scientists researched and found that the sand had more weight than the ordinary sand and it contain minerals. Soon the sand was exported from here to the other country.

In the coastal parts of Kanyakumari coral reefs are commonly found. Coral reefs should be saved as it useful for fishes to breed and multiply in huge numbers.

Sea turtles help in cleaning the sea by consuming the organic wastes. However due to the pollution of water they die. Also in earlier days we can easily catch a glimpse of odal crab moving through the sand. However it has been reduced due to the interference of humans with nature. Sea and its constituents are very important.

Nearly 400 ponds are destroyed in Kanyakumari district due to industrialization and urbanization. Ponds are also polluted as the seas and no proper steps are taken to clean it. Our district has the advantage of being a place where nature gifts reside. It includes mountains, forests, farmlands and water resources. Forests play a major role in the process of water cycle. So we should stop deforestation and promote the growth of trees. Water is polluted to a large extent by humans. Due to the inorganic chemicals from the factories fishes die and the humans consuming it die. Earthworms and Bacteria help by eating the wastes in the soil and convert them into fine grained sand. Using pesticides can cause soil pollution and kill them. Eating food with chemicals can lead to kidney failures and kidney salts.

Our ancestors eat Chamba rice along with its chaff. So they had lived healthily because it controls various diseases like sugar, cholesterol etc., But now the condition has been changed a lot. We are infested with a lot of diseases.

We should not break mountains for taking stones. Taking sand from rivers should also be prohibited. We should produce our own vegetables at home so that every family remains healthy and live long. He also told about various coastal villages & important places like Manakkudi, Chothavilai, pallam, Sanguthurai, Muttom, Colachal, Thengaaipattinam, Kadiapattanam, Kottilpadu, Irayunputhandurai, Kodimunai, Azhikkal etc.,

His speech was marvelous and it was really interesting. I gathered a lot of information from his talk. His speech made me to realize the importance of protecting nature. I also got good knowledge on coastal areas of Kanyakumari district which I have never known before.

Next came Dr. Arul Prakash, Associate professor of psychiatric in Aasaripallam medical college. He gave a talk on psychological aspects of medical science. He began by telling us the definition of psychology. It is the study dealing with the diseases of the mind. There are persons of two types;

TypeA:Punctual,StrictandRegular.(Police,Army)

TypeB:CoolandPatient.(Civil)

Type A persons are more prone to stress induced problems mainly strokes, heart attacks, etc. A person with both the qualities will be a proper one.

Stress can be classified into two types ;

Eustress (Positive stress) : Propels you in the right direction.

Distress (Negative stress) : Makes you tensed unnecessarily. Leads to many problems like Bronchial asthma, Skin and Heart problems

The mind is composed of three compartments ;

Id : Uncoordinated and unorganized personality.

(e.g.: Baby cries to eat ice cream.)

Ego : Acts according to reality.

Super-ego : Organized part of mind.

The human brain has defence mechanisms. It is mature and immature in nature. The matured one has reality and humor while the immature one has childish and no reality. If you are angry on somebody then forget them. This helps you to reduce stress. The other ways to avoid stress are ;

Taking good food.

Having good sleep. (Hormones are activated only during night.)

Good and adequate exercises.

Talking to others. (Increases your self-confidence)

Having good and positive principles.

Thus he ended his speech stressing on the above principles. His speech encouraged me to get relief from distress which I met often.

Soon the Chief Guest of the day arrived and he was Dr. Durai Gunasingh, the Dean, Govt. Medical College, Nagercoil. The compere was Miss. Gby Atee, the green team leader. She called upon Mr. Velain to deliver the welcome speech. He welcomed Dr. Durai Gunasingh, Dr. Arul Prakash, Dr. Jayalal, group coordinators and the members and students of KAP. Then he told us that it was Gby Atee's birthday that day and we all sang the birthday song chorusly. Soon it ended happily.

Then Dr. Durai.Gunasingh delivered a short speech. He said that we should learn a lot of things. We should also be ready for " **Unlearn to Relearn** ". We should do everything practically. We should understand the concept and apply it in various aspects. When we do like this we remember everything. This is an important thing in medical studies. Doctor is a noble profession. He also said that about 200 doctors are working here and about 2000 people visit the college every day. Although his speech was short, it was worth to hear to his golden words.

Dr. Jayalal, the associate professor of surgery, was next on the row of orators. He gave a talk on community health. Before getting into the topic he told us to work as a **TEAM** (**T**ogether **E**veryone **A**chieve **M**ore). He stated that diseases are of two types :

Communicable : It can easily spread from one person to another.

Non - Communicable : It includes cardiac, respiratory and cancer problems.

In India communicable diseases account for about 35% and non-communicable diseases account for about 65%.

Reasons for non-communicable diseases :

Smoking : 85 % of the smoke from cigarettes is inhaled by the others. However the person smoking it only inhales 15%. So we should move away from that place.

Alcohol : 2 crore rupees is spend on alcohol everyday in Kanyakumari district.

Junk food : A parotta gives about 800 calories.

No exercise : A man without exercise will become obese and unhealthy.

" Health is a state of mental, physical and spiritual happiness " and he concluded. This raised my awareness about being healthy and living happily.

We were taken all around the hospital. The first place visited was the anatomy museum. Dr.Vinoth and Dr.Lenin guided us and cleared all our doubts. I saw various parts of the human body including skeletons, skulls, heart, lungs, intestines, nose, brain, eyes, etc., The next room was the dissection room where we were given some information about the anatomy lab. Dr.Vinoth told us that formalin (liquid), sodium chloride and glycerin are used to preserve the dead bodies and a normal human body consists of 5.5 litres of blood.

Then we went to forensic medicine department. I noticed a lot of preserved animals in the room including snakes. There were also many huge posters on the sides of the room. It shows a list of various preserved animals, poisonous plants, persons suffering from accidents, etc. There were two boards; one depicting the types of fracture in skull and the other one indicating the methods in which a rope can be tied. Dr. Rajesh guided us in that

department and said us that forensic is kind of legal medicine. It deals about the causes of death is caused. It can be found out by examining the bones and injuries. Ages and reasons of death can also be found with the help of forensic medicine. A few of us also asked questions to which he answered promptly. The questions are,

Whether bones differ from a fat to thin person?

No. Persons of same height have equal size of bones. But the size of bones change when there is a difference in height.

How to determine the time in which the person died?

A few organs of the body work even after death. We can measure the time using it and using the decomposition of the body.

We went to another block where we entered into a small room in which a machine was placed in the middle. Dr. Kannan said that it helps in curing skin rashes etc., in the face by emitting ultraviolet rays for time duration of 2, 5 or 8 minutes.

Then we went into a minor operation theatre. It includes wash, store room and staff room. They wear apron while they are in operation. Minor cases are dealt here. The various components include Nitrous oxide are used for fainting the patient. Pulse rate detector shows the pulse and Cautery is used for sealing the blood vessels. Another bed consisted of an Endoscope that helps to look inside the bodies, suction apparatus and a Shadow less Lamp. I liked all the new experiences that I had there. I also liked the college where fresh greenery were found everywhere.

Then we moved to a discussion hall where we were given a seminar on giving first aid to a fainted person. It was given by the department of anesthesiology. He said that a person can move only if the heart and brain functions. If any problem occurred in the brain it can only survive for 3-4 minutes because the passage of glucose will be stopped. If a person faints they should be given a proper first aid and the ambulance should be called. The sequences of giving the first aid are,

- Shake the shoulder and ask are you alright.
- Lift the chin so that the airway becomes open & straight. Give a jaw thrust.
- **Look** for the chest movement, **Listen** to the sound, **Feel** the breathing in your cheeks.
- Keep the head tilt, pinch his nose and keep your mouth over him and blow for 2 times.
- Feel the pulse in the Carotid artery of the neck.
- If there is no pulse compress the heart between the Sternum for about 30 times.

He demonstrated all these actions with the help of a human model. Then he asked a few volunteers to try it and I clearly understood how to treat a fainted person. He also showed us two videos which indicates the do's and don'ts while treating a fainted person. It was the first time that I came to know about giving a proper treatment to a fainted person.

Then we all once again assembled in the examination hall where we had our lunch at 2.00pm and it finished by 2.30 pm. Mr. Velaian asked us to choose the topic and we Yellow team selected " Good Sanitation in seashores " . Then we went to our respective teams where we were given tips on making pamphlets. Pamphlets shall have information regarding

the good sanitation practices in seashore. 500 pamphlet should be made and bought during the coastal study tour. Mr.Edwin Sam, the talent motivator of our team gave us the research topics and we discussed about it. Soon we reassembled once again.

Mr. Benzigar Rajan, Dy. Manager, IPRC/ISRO, Mahendragiri was the last speaker. He said that the coastline of Kanyakumari is 67 Km from Neerodi to Vattakottai. The total coastline of Tamil Nadu is 1074 Km. However about 27 % of the fishermen reside here. This is because a lot of estuaries are located here which are the best places for fishing. Estuary is a place where a river meets a sea and is filled with freshwater. Therefore fishes breed in large amounts here which make the fishermen to catch fishes easily. There are five major rivers in Kanyakumari district that forms estuary. They are Palaiyaaru, Thamiraparani, Valli, Paamparu and Panthiyaaru. 200 types of fishes are here because we are bounded by three seas. There are also several other marine organisms. Sharks are found in abundance in Marthandam. Turtles are found in Raajakamangalam. Sands with chromium, silicon and various other minerals are found in Manavaalangkurichi and Leepuram. Lot of coconut trees can be found along the coast. There are no rocks in Kovalam beach. The ways to protect sea life and seashores are ;

- Don't contaminate the seawater by sewage and other chemicals.
- Stop erosion of sand in seashores.
- Provide proper facilities to the fishermen.

Also in earlier days people used to catch fish only to their needs. But now the fishermen use large nets to capture the fish. They throw small fishes on the seashore and sell only the larger ones. This results in the extinction of small species. He concluded by emphasizing that we should promote the development in seas and seashores. His speech made me to think a lot about the conditions of seas and seashores in the present world and I hope that it would be useful for us to make pamphlets/notices. The meeting ended by about 4.00 pm with the national anthem.

The meeting was a very good & informative and I have learnt a lot of things about medical sciences, seas and the seashores etc., I understood various parts of a human body and first-aid. On the whole it was an informative programme. My thanks are due to all the members of the KAP for arranging such a useful programme.

8.R.S.Raksha

Red Team

On 29/11/14 at Asaripallam Medical College we had our 4th meeting after the selection process. The meeting started at 8:30 am.

At first our brain of KAP, Mr.Velaian gave a frank talk on writing the report . He told that we should write the name and the team in which we belong to , Don't ask any help from computer centers or others if you are not able to type just write and submit and should send the report to the coordinator for correction. He told about the next camp on 6th of this month. He gave us 1 topic for each of the group.

Mr.Gopalan mentioned about the reports that he received without name ,he told us the way of writing a report. He told us to write the proper spelling with professions of every person. Grammar mistakes should be avoided and the reports must be meaningful and at the last he concluded the session by telling that the conclusion should be written by what we have learned from the meeting.

Then the next session was by Shri.Mangavilai.T.Rajendran, All India Radio offered a speech and started by telling that this topic is very useful for us. We must protect our environment atleast for our future and gave some more information about the resources that are being used widely since 100 years. Vattakottai sea has more colored sands and have more rock and shells and told that the waves do not gush with more force but the Kanyakumari waves gush with more force that means the direction of wind is west to east and the first human was seen in this region. Earth quake under the sea causes Tsunami and high tides. Sea sand has more minerals. The coral Reefs are the house for fishes and if there is no coral reefs there will be less number of fish and an amazing fact that fishes go around the world. The American forest is the world's largest forest then he gave us a health tip that eating Red rice instead of other rice, reduce sugar and pressure. All of his points were very useful for us.

Then the next address was given by Dr. Arul Prakash. It was the first time I heard in my life time that too much punctuality, sticky to rules gives us debt .He told some thing related to mind and told that handling the stress is done by the mind and about Ego, Super Ego and Id and explained then concluded his speech.

After that Gby started the compeering session and first she invited Velaian Sir. He welcomed everyone and at that time Dr.Durai Guna Singh, Dean of Govt. Medical College,Asaripallm arrived there. Shri.Velaian announced about Gby's birthday and we had a small celebration by singing birth day song and wished her. We had some interesting talk from the dean and ended his speech with a wish.

Then Dr.Jayalal gave a speech and he welcomed everyone present there.He told that TEAM is expanded as Together, Everyone, Achieve and More. He told that 67% of people are dying because of non communicable diseases and 15% because of communicable disease. He emphasized that Smoking is injurious to health of the smoker as well as the person standing near to the smoker this is because only 15% of smoke is entering into the smoker's body and 85% smoke is being inhaled by the people near to him/her. At last he concluded the session by telling we should eat more vegetables and fruits.

Then we assembled a line and went for lab and campus visit at first we went to Anatomy Museum there it was very horrible for me to see different parts of parts we saw hip bone, knee bone, hand, skull, nose, large intestine, stomach, kidney, liver, heart .. Etc that were put in Formalin solution. There Lekshmi sister told the feedback.

From Anatomy lab we went to Forensic Medicine [r!/:lk; rhu;e:j kUj;Jtk:] There we saw many weapons, which is mostly used in crimes and Railways, fire accidents etc. There I saw a note written in the wall that "Justice is nothing but Truth is action". They made

us to know what is Autoxy it means analyzing what is the cause of death, the weapon used for the crime, if the criminal is left or right handed, to know if this death due to sexual, what is the age etc and he told that if we expose the body in open air it will decompose soon. We asked some questions and he answered.

The next place of our visit was the dermatology section where Dr.Prajeetha and Dr. Kannan guided us and they clarified all our doubts.

After visiting this compartment we went to minor operation theatre and met Dr. Raj kumar he gave us a clear picture about the apparatus used for getting ready for operation like Apron or theater dress and many more. Then we went inside the theatre and we saw some more instruments which is used for operating a patient.

In the conference hall we met Dr.Edward Johnson and Dr.Reneeshma. There in the wall it was given that it is the Dept. of Anesthesiology . At the beginning itself he asked us "how will you know that a person is alive?" we answered the correct one that when he is conscious he showed us a ppt and explained us briefly.

These are the steps to give first aid to a fainted person

First.

Gently shake the person who fainted and ask loudly "are you ok ?" if he/she is not responding. Then contact a hospital. till that do this first aid.

Second.

Tilt the head and chin.

Third.

Keep your cheek near to the nose and feel if the person breathing and check if there any movement in the chest as taking breath.

Fourth.

Check neck pulse.

Fifth.

Pinch the nose and give 2 rescue breathe.

Sixth.

And in the middle of the chest press 30-35 times and give rescue breath 2 times and follow the same routine till the doctors come.

We assembled in the hall at 2:30 pm and had our lunch it was awesome. Then we had a group discussion on our topic *பாதுகாக்க பட வேண்டிய சுற்றுலா இடங்கள்* Mr.Benzigarajan Sir ,Jayakumari Mam helped our team.

After some time Benzigarajan sir started his speech and emphasized that fish from sea goes to fresh water, Tortoise are much protected nowadays and seen in harmless environment and more he gave an excellent speech.

Later Velaian sir reminded once again about the camp with our parents. Then we sung National anthem and Edwin Sam sir asked us to share our experience in the meeting I went forward to speak. Then we had a cup of tea and returned to our home.

"Let food be thy medicine and medicine be thy food."

- ARCHIMEDES

To learn more on Medical science KAP has arranged for another interesting program that is the training program on medical science at the Govt. Medical. College, Asaripallam. I reached the college at 8.20 am in the examination hall. And I was very blissful to meet my friends again. At 8.30 am sharply the program started. The first introductory address was given by sir. Mullanchery M. Velaian. He mainly told every one of us about report writing. The time limit was given for each school but all students were waiting until the last date given and sending the report on the last day which is not good and should send it before the last date. When we are writing a report our name is very important. At 12.00 pm in the noon sir got an email attached by a report on a working day. So the net centre is doing all works for us. We must not give the man in net centre to do these works instead we should do it in the net centre. Even we should give our school to do this. Any information that we want we can search from net but we should not copy and paste it. It is a useless job that we are doing. The report or essay or something we prepare we should send to our co coordinator and tell them immediately to correct it. He also asked every one the name of our team coordinator and last he also asked our team (RED TEAM) and our team coordinator was Mrs. Jayakumari. Since she is not having mail facilities we have to send our works to Sir. John Rabikumar, our talent motivator. And also after we send we have to contact them and convey that we have sent it. Then he reminded us about the next gathering which will be held on 27th and 28th of December that is the coastal study camp. He also gave us three topics in which a team has to print 500 notices to create awareness to the people in land areas. The topics are as follows:

கடல்வளம்காப்போம்.

பாதுகாக்கப்படவேண்டியசுற்றுலாதளங்கள்.

நன்னீரைபாதுகாப்போம்.

கடலோரதூய்மை

பொழிமுகங்கள்

But before we have another stimulating program, which is going to be conducted soon on 6th and 7th December that is the "Clean India" awareness program. The KAP students should be at the Marthandam bus stand at 6.30 am. And the students near Nagercoil should be at the Udupi hotel Vadesery at 7.20 am. In a team 2 members should have a bag to collect waste. It will be held in Thambikoyil in Vallioor. Then he concluded his speech.

Next Sir. Gopalan, the headmaster of Excel central school, gave his talk. He mentioned that he got a report yesterday without name. First when we write

report we must include the title. KAP young scientists programme 2014-2015. Then we have to mention the venue, date, etc. There were many spelling mistakes of names in the report also many grammatical mistakes. We must also write the qualification of a person in the front or back of his/her name. So he wished everyone to do our best and finished his talk.

Then Sir. Mangavilai D.Rajendran, All India Radio Nagercoil, gave his speech. First he asked who has not seen the sea. And Immaculate, member of yellow team rose up her hand.

The first village from Kanyakumari District is Arockiyapuram and the last village is the Vattakkottai. The half side of Vattakkottai was inside the sea but now it has been separated. We could see many shells there. Many tortoises too give birth to their young ones. In East side the waves are low and in the West the waves are high. The reason is the direction of the wind. Before 10 years in a sea area there were many coconut trees. But now there is no tree, and people have cut it. In Indonesia side below the sea at 16,000 km the rock piece was broken so that hit the waves are the waves started to move faster and it caused Tsunami. These waves come slow but it had a speed of 800 km.

K. T. Pachaimal is an Indian politician and incumbent member of the Tamil Nadu legislative assembly from Kanyakumari constituency. He is currently the Minister for Forests of the Government of Tamil Nadu. He had to pass the sea to do a work he was travelling in a boat. He came to sea by a jeep and the jeep was waiting in the sand area. At 10.00 am in the morning on 26th December 2004, Tsunami came there and the jeep was taken by the waves but Pachaimal did not have any danger. He was safe.

In Kanyakumari, the places which has rivers, lakes, ponds, etc. are damaged a lot. Others places are damaged but not much. He also stated about the natural fencing. A tree which stands in sea to protect the sand and it will not harm the sand. It is called as "தூழைமரம்" in Tamil. In sea, when the density of salt is high there won't be any fish. For example: Red sea. But in Kanyakumari District there are many fish because there is less density in the sea. Coral reefs are like our home to fishes. There are many differences when we compare olden days and modern days. We should avoid eating white rice because the red rice is being fully polished to white rice. So in order to avoid diseases we should avoid eating white rice. And when we want stones we can get it in Kaavalkinaru because when we dig the sand we get only stones instead of breaking mountains. So we should bring our environment a sustainable one and concluded his speech.

Next it was the time of Dr. Arul Prakash, Associate professor of psychiatric, Govt. Medical. College, also a KAP team consultant started his talk.

Till the last 5 years the training on medical science was held in the same college. So he felt very much glad. We have come here to learn an overview on medical Science and his

speciality was psychiatry, a study which cures mind diseases. He asked everyone whether mind problems affect the body all said yes, which is the correct answer. Too much of punctuality will lead to tension. Punctuality and orderliness will give tension but we are told to be punctual. He mentioned that we must try to maintain punctuality and cleanliness. But we should not give too much stress. Stress is of 2 types they are:

- Eustress
- Distress

Eustress refers to the positive thought of human beings. In the same way distress means the tension condition which we feel while we get the exam timetable. To overcome our stress we must do everything correctly. Mind has 3 compartments like:

- Id compartment
- Ego compartment
- Super Ego compartment

When we have an aim we try to achieve it that's called as Ego compartment. And when our grandpa says anything we sometimes take his advice but mostly we don't do it and that's called upper ego compartment. We have to have a relaxed mind always. To develop it we must have a positive thinking, we should be confident, eat good food, sleep well, do regular exercise and talk to people. God created day and night, day to do our works and night to sleep. So he described about relaxation of mind and ended his talk.

Then it was the beginning of the second session at 11.00 am and Gby Atee, the leader of green team had a great privilege to anchor the session. First the introductory address was given by the brain cell of this program Sir. Mullanchery M. Velaian. He welcomed all dignitaries and it was the time to sing HAPPY BIRTHDAY because it was the birthdate of Gby Atee. So we had a small cake cutting and enjoyed for a while. Then it was the time of the Dean of the college, Dr. Durai Guna Singh to give his presidential address. It was a great pleasure for him to participate in the training program on medical science. When he was small he did not get an opportunity to study like this. But they will only memorize. Our life also depends on our result. We have to unlearn to relearn. So we have to learn a theory of medical first then we have to do it practically so that we will never forget. Even our Government has introduced "Active learning method." He cordially welcomed all young scientists and concluded his speech.

Next Dr. Jayalal, Associate professor of Govt. Medical. College and a consultant of maroon team spoke about the "community health."

First he welcomed all. When we have a team we will surely have a success. The full form of team is:

- T- Together
- E- Everyone
- A- Achieve
- M- More

Diseases are divided into 2 like communicable diseases and non-communicable diseases. Communicable means it can spread to everyone but non-communicable will not spread to anyone. In India 67% people are dead with non-communicable disease. A cardiac problem, cancer, diabetes are the main diseases that occur in people nowadays. By avoiding alcohol, avoiding smoking, doing exercise and avoiding junk food we can prevent diseases. It is our duty to stop everyone from doing bad habits. If we watch serial in TV, even a thief can enter into our home.

A mother was feeding her baby with bottle instead of feeding in the baby's mouth she fed him in his nose because she was watching serial. And last we must take a pledge that we should make everyone stop doing bad things and ended his speech.

Then it was the time of our study lab. First we went to the Anatomy Museum. We were guided by Dr. Lenin and Dr. Vino Victor. And we saw all the parts of our human skeleton separately and also the stages of pregnancy. All parts were kept in a bottle with a liquid in it and it is called as the liquid formalin to preserve them. Then Lekshmi, the former young scientist gave the feedback and gave the vote of thanks. Then a remembrance book of last year was presented to the guide members.

Next we went to the Department of Forensic Medicine. And we were guided by Dr. Rajesh. In this they will be doing Autopsy. Then they will be assessing the age of the individual. He explained about the uses of Autopsy and the works of it. So many young scientists asked doubts, he clarified all our doubts. Then we had Jeshwini, the former young scientist to give away the feedback and the vote of thanks. And a remembrance book was presented to Dr. Rajesh.

Then we went to a room. We were guided by Dr. Prajeetha and Dr. Kannan. We saw a machine which was called as ultra violet photo therapy and it is used to cure hand skin diseases. The machine has lot of tube lights inside and the lights will focus on the patients hand for a required time and it will be cured. Then Lekshmi the former young scientist gave the feedback and gave the vote of thanks. Then a remembrance book of last year was presented to the guide members.

Next we moved to the minor operation theatre where we had Dr. Rajkumar to guide us. He showed the store room and the hand washing area and next we saw the patient cot and also the pulse meter. It was quite surprise to us because all of us got a rare chance of seeing all materials that are used in the operation theatre and their uses. Then Reshma, leader of maroon team gave the feedback and thanked everyone. The last place of our visit was the Department of Anaesthesiology. And we were guided by Mrs. Thanalakshmi, Dr. Edward Johnson and Mr. Dibin.

A person is alive when his heart beats, when he is breathing and when the brain is working. So airway, breathing and circulation are the 3 components of support. When a person is just fainted, we must gently shake his shoulder and ask him, Are you alright? Then if he does not respond check whether he is breathing with your ears or cotton. When there is no breathing we should breathe deeply and give our air to the person when

his chest moves we must do it continuously but when his chest doesn't move we must keep our left hand in the centre of the rib cage and on the top of the left hand we must keep our right hand and close it. Then we must push and push so that the air comes out. We have to do this at least 30 times. Then Lekshmi, the former young scientist gave a demo for us but she did not feel the chest moving when we blow her air to the person and Edin Jijo of yellow tried for it he too didn't get it then Edwin Sam sir did it we all saw the chest moving. Even Raksha and Nivedh Sankar from Red team tried it. Next Abina, the leader of red team gave the feedback.

Then we had our delicious lunch. At 2.30 pm Velaian sir reminded us about the next meeting. And we had a team discussion until 3.30 pm. Our team co-ordinator and our guide decided about the printing of notice and also we discussed many things about the notice that we have to print.

Next Benzigar Rajan sir, Dy. Manager, ISRO Propulsion Complex Mahendragiri gave a small talk about the topics that Velaian sir told to collect for the notice and he mentioned some of the main points and ended his speech.

Then it was the time for giving feedback by the young scientists. First Meera from blue team gave her feedback then Srinidhi from green team, Jenisha from Maroon, I, Sabrina Lynette from red team gave the feedback and Abirami, leader of yellow team gave the feedback. Also Soorya Vijay from green team, Raksha from red team and at last Abina, leader of red team gave the feedback. To conclude the program we had the chorus singing of the National Anthem. And we had tea and returned home by God's grace. I had a very good time and also I learnt many things about medical science which was very informative. So I convey my gratitude to KAP for arranging such a useful program. Thank you one and all.

10.Sree Meera Subramanian
Blue team

"Some people dream of successes while others wake up and work hard at it . "

29/11/14

This programme was a interesting one and which made us endeavour because the human parts which we saw in pictures were shown lively to us. Those who study for doctor will only get this opportunity to see , but we, eight standard students got a nice opportunity to observe. This was a fist step to the students , those who have the ambition of doctor

Yes , we went to the Asaripallam Medical college in Nagercoil. We were said to assemble in examination hall at 8:30 am . I was so alacritic to achieve my aim.This was the fourth meeting after the PowerPoint presentation . The place was fully covered with trees which made us all , the colorful cap students vibrant and enthusiatic .And the vibrant persons who was with us were :

Shri.Mullanchery Velaian - organizer of KAP

Shri.Johnson - retired HM

Shri.Edwin Sam. - Social scientist

Dr. Arul Prakash - Prof. Of Psychiatric, Govt medical college , Nagercoil.

Dr.A . Jayalal. - Prof . of surgery, Govt. Medical college , Nagercoil.

Mangavilai D. Rajendran. - All India Radio

Shri Benzigar Rajan. - Dy.Manager , ISRO propulsion complex , Mahendra Giri

Shri Gopalan - coordinator of a team

Thiruvengadam -co ordinator of green team

The first session was started by the speech of Velaian sir .He pointed out some mistakes in us mainly the reports , which were sent to him.He said not to send the reports till the border date which we have got . Then he instructed to type the reports in word file and not to type in web page. And he asked to save the file with name- programme name - team . And we should ask the co - ordinators to correct the report . In case if the coordinators aren't available we should ask some other person to correct it. Then he asked the leaders to be advanced . And he asked the management leaders , the mistakes made by the members. Then he informed us about the next camp , the bit notice which every team have to print with the sponsors below the notice . And he also informed us that , by the talk of Rajendran sir we can get an notion for the notice. In the next camp we are going to gain knowledge on the field of Organic farming , Sustainable Environment and Clean India .

Then Velaian sir invited Gopalan sir to speak . Gopalan sir also informed us the mistakes which we made . He stated that while first typing an name , we have to mention their position also .And the name shouldn't contain any mistakes . He also said that report is a record , so we must mention the date.This method of typing will help us in the future and report should also be a meaningful one . And at the last it should also contain thanks message.

Then as Velaian sir said Mangavilai D Rajendran sir came forward and spoke. He started his talk by asking us a question. The question was , WHY WE NEED TO SAVE OUR SURROUNDINGS ? The answer to this one was to save our future generation. Then he said that the first village in Kanyakumari district was Arokiyapuram and the second was Vattakottai . Vattakottai is a cave where half part is in sea . But now the cave is somewhat away from sea. The robbers can use this way to escape . And we can collect shell , sea living organism there.

In olden days people used to light a lamp using oil and they used this for a light house . Tortoises used to come out of the shore and lay eggs , but now the tortoises are not coming out of sea because tortoises need a peaceful situation but now it is being decreased by the presence of human beings.

Kanyakumari is a tourist spot , it consists of Gandhi mandapam, Meenakshi Amman temple , Vivekanada memorial rock , Thiruvalluvar statue etc... . Then he said that , the waves in

the western sea are high while in the eastern side the waves are less when compared to west . This is because of the presence of more air. Nowadays people used to put the big shaped rocks into the sea thinking that if done so, the sea water will not enter the nearby areas but it doesn't happen practically. Then he said an interesting one that , in 2004 tsunami was in Kanyakumari because in Indonesia side under the sea there was a high pressure , that reflected in Kanyakumari as a tsunami . To prevent from tsunami nature have created sand dunes . But we people destroyed that too . Thazhai is a type of tree that can't be taken off from the soil , even elephants also can't take it off. In 1883 a tsunami happened in Kanyakumari. At that time British insisted the people not to enter the sea but some people hid inside a small room inside the sea. The people who were inside were so safe than the people who were outside . Rivers and lakes are formed from the oceans . But now we are polluting the rivers also . The river in Kulithurai , Kollachel are being polluted in Kanyakumari. If there is more salt in sea , none of the living organisms can sustain. Inside Bay of Bengal there are many coral reefs . If these coral reefs are destroyed , then many deep ditches will be formed . The fresh water from Kanyakumari will pass on to the Kerala canal , so less salt is formed . This the reason why there is large amount of fish in Kerala . In olden days people those who go for work will never forget to take their umbrella because there was a lot of presence of rain. Then he informed us about our Nanjil nadu . In olden days , people used to bath in canal but now everyone are bathing in their home. The canal will be a pure and transparent one , and we can see the different fishes present in the canal . But now we can't see the fettle of the canal , its full of waste . In olden days, heart patients were less and the spread of bacteria were only there . But now both are being there .

One time ISRO scientist researches cut the root of a tree and they made that as a powder . If we apply the powder in our hand and if we show that in sunlight , it could reflect . Our human waste are being separated by the kidney .

In the past there was a fight held between Kerala and Tamil nadu for the Nagercoil. Because Nagercoil was a fertile land . In that we won . Chickens waste will spread disease . So , the people in Kerala will send the chicken waste to our state . Then , they are taking the pond sand from our state legally . The people who are living outside our state are knowing our states speciality and they are using it . Why then we people can't know our state's usefulness ???

Then he concluded his talk by saying that if we grow the crops in a natural way , we can cultivate the crops anytime .

Then at 10:20 am Dr. ARUL PRAKASH sir spoke . He is a doctor in the field of psychology. Psychology deals about mind diseases. His talk was based on stress. If we do our work punctually , stress won't arrive us . Over punctual is also bad in one side . This can be divided into two types . They are:

- Type A
- Type B

Type A : These persons will be so strict . Army , Police can be a example for this personality. From them heart attacks , stroke , stress induced problems can arrive .

Type B : These personality typed persons are flexible , relaxed .

We students should be mixed . This stress can be further divided into :

Eustress: positive way

Distress: negation way

Stress can be handled by three ways ,

1. Id
2. Ego.
3. Super Ego

He concluded his talk by giving us a positive state of mind,

To have good state of mind . We should follow these,

Good food : The first principle of a good mind is to take healthy food at a proper time.

Good sleep : In a day we have to sleep for 7 to 8 hours . If there is proper sleep then , there will not be a proper metabolic rate , growth promotion.

Good exercise : We have to play thirty minutes in a day . At least we can go for a jog or walk .

Talk to people : First we have to speak to our relatives because in time of emergency they will help us . This will improve our self confidence level ..

Then at 10:57 Gby - the green team leader gave us a short and sweet feedback . Then Gby welcomed all after the arrival of the chief guest . She invited Velaian sir to give over the inaugural address . VELAIAN sir welcomed Dr.Durai Guna Singh , Dr. Arul Prakash , Dr. Jayalal and all eminent persons who were there . Then he said that 29th , this day is the birthday of GBY . We were amazed . And she cut the cake and all team sung the birthday song for her. She was also surprised .She gave a peice of cake to all who were there in the stage .I think she is so lucky to celebrate her birthday in front of every eminent persons.

Then she welcomed Dr.Durai GunaSingh sir to talk few words. Dr. DURAI GUNA SINGH sir was happy to meet all and for participating in this programme . When he was in our age , they used to learn subjects by mugging up without understanding the meaning . But we have got an opportunity to study without mugging up . Then he said about the beautiful green college . On 29th we could learn more about medical science , all are practical ones only . He concluded by saying that this program could bring successes in us.

Then Gby invited Dr.Jayalal to speak . DR.JAYALAL sir spoke that this college is a 110 acres campus. In this hospital around 2000 people take treatment everyday. Then he said the full form of Team

T ogether

E veryone

A chieve

M ore

Because of the team work only , this college runs in a good way. Then he taught us about the Communicable diseases and Non communicable diseases .

Communicable diseases spread by the infected people . By their sneeze it will spread.37% people die due to this . Then he said about non communicable diseases.Non communicable disease means the disease won't spread or it won't affect others . 67%of people die due to this disease. The mistake done by us will affect us . Cardio problems, respiratory problems, Cancer can be a example for this disease . The four important reasons for the cause of non-communicable diseases are alcohol , smoking , lack of exercise and junk food It is the responsibility of everyone to reduce it. If a person smokes , it affects them 15% only and it others by 85% . Smokers are equal to a terrorist. So , thus we have to spread the awareness about the reduction of smoking. Then he said that two crores of people are taking alcohol everyday. By taking more fruits and vegetable we can be prevented from non communicable diseases. Then he concluded his talk by saying that this a great privilege to be here with us

Then the main climax came , we went to the ANATOMY lab . Really that was amazing experience and which made us alacritic .In the anatomy museum , we saw each and each every parts in our body like pancreas , large intestine , small intestine , a man without skin , eyes , popiteal fossa, soleus muscle. , thigh , kidney , liver , penis, ovary , heart , brain , ceacum , lungs , larynx , nose , twins body , muscles of facial expression , different stages of baby's , bones , skeletons etc....Then we went to another lab were Dr. Vino Victor and Lenin sir spoke. Embalming is the art or science by which human body's are preserved from decomposition . The dead body's are kept inside a liquid . The liquid is made from Formaline , NaCl , Glycerine . Then we gifted them a last year book 'Nurture Nature' . And the feedback was given by Lekshmi - the former young scientist.

Then we went to the Forensic lab. There we saw many dead photos , weapons , fishes , animal bones , cobra , scorpion , stone fish , eel , nux vomica , datura etc in separate glass boxes . Then after seeing all , we came and sat in the benches there . There we met the HOD of the department Dr.Rajesh . This forensic medicine relates with phosmadan , administration of justice , examing bone, a natural or unnatural one , left handed or right handed ,what type of weapon is used . Then we cleared our doubts with him .The feedback was given Jeshwini -the former young scientist.

Then we went to a department of venerology. There we saw a machine known as PUVA . Dr.Pratteja mam explained about the machine. She said that this machine can be used to prevent our affected skin by the ultra violet rays . In this machine there were few lights attached in the machine. The one who goes inside should cover everything expect the affected area. And Lekshmi sister gave a feedback for that session.

Then we went to the minor operation theatre where Dr.Raj Kumar sir explained us about the operation theatre. Before going to the theatre the doctors used to wash their hands with soaps six times. And they used to wear a special dress. In the patient cart they used to ask the patient to lay in that cart . And use shadow less light because while doing a

operation , the doctors shadow shouldn't be seen on patients . And they used to put a anaesthesia before the operation for a patient. The anasthesia is composed of nitrous oxide and oxygen. They will use pulse metre to measure the pulse rate.Then the feedback was given by Reshma of maroon team.

Then we went to the department of anesthesiology. .Dr.Edward John and Dr.Dhanalakshmi reached us about the first aid.To find a person that they are alive means , they will be conscious and pulse rate can be found. If they are unconscious , they can be prevented within five minutes . To do that first we have to inform a ambulance. To rescue , the basic life support is required . They are,

1. Airway
2. Breathing
3. Circulation

First step to prevent : First we have to shake their head and we should ask , 'Whether they are all right? '. Airway should be done.

- Head tilt
- Chin lift

Second : Breathing should be done.

- Look
- Listen
- Feel

We have to pinch their nose and we have to take two breaths and in their lips we have to give over the air.

Third : Circulation should be done. First we have to feel the pulse rate in Adams apple .If they are unconscious , we have to locate rib cage and we have to keep the hand in middle of lower half of sternum and fingers away from stomach.

These three steps must be done while a person is unconscious.

And he also insisted that which we shouldn't do .

- Shouldn't pour water in the person
- Shouldn't jump over patient
- Shouldn't also feed water

And we some students tried it off and Lekshmi sister was the first to go .Then they said us rtry the demo in a plastic human but it had pulse rate machine. Then the feed back was given by Abina of Red team.

Then we came to the hall again and we went to have our yummy delicious food. Then Velaian sir informed us again about the next programme. Then we had our team discussion till 3:30 pm Then Benizagar Rajan sir spoke . Then he said that to prevent water pollution we have to built a house and clean toilets to them , they only they won't secrete waste in sea . And home waste also shouldn't be added to sea. The AVM channel in Kanyakumari are being polluted severely .And we shouldn't use large fishing nets to catch fish due to this small fish dies.

Then the feedbacks were given by me , Meera , Srinidhi , Jenisha , Sabrina , Abirami , Suriyah , Raksha , Abina , Sanjana .Then Velaian sir came and said that to send the reports properly.

This programme made me more confident , and it made me enthusiastic . It made me a inspiration in the field of medical science. Really I was so zealous to see the anatomy museum . And it made me to gain more knowledge about the importance of Kanyakumari . And to meet each and each every eminent person . I could say a lots and lots of thanks to KAP from the deep of my heart.

" The most successful people started from nothingThey didn't wait for the opportunity to knock but created the opportunity on their own....worked hard and made history."**THANKS TO KAP**

**11.DANI ROVAS
MAROON TEAM**

Wherever the art of medicine is loved, there is also a love of Humanity

-Hippocrates

Medical science is an art that provides remedies, cures and safeguards man against various diseases. To let the Young Scientists understand that medical science is the love for Humanity, we had a **TRAINING PROGRAM ON MEDICAL SCIENCES** at Government Medical College, Asaripallam on 29th of November. The day was very beautiful and clement. I was on cloud nine that day, as I underwent a new experience in the college with prominent personalities. The selected students, the members of KAP and the chief guests assembled in the Examination Hall at 8:15 am. The meeting commenced sharply at 8:30 am with the presence of all the members.

Mr.Mullanchery M.Velaian, the organizer and brain of KAP gave the welcome address and began the program. He first spoke on the report. Report should be send in advance and not in the last date of acquiescence. While sending the reports make sure that the file name includes your name, the program and the team you belongs to. The report should be written and send by us for the benefit of ours. After sending the report, inform to whom you send the report and claim them to correct it. Next he notified regarding our froth coming meet of Study Trip to the Seaside which is to be held on 27th and 28th of December. For this meet we are supposed to have at least 500 copies of notice with 10 to 20 points in Tamil (team wise) on the topic given to each team. He then said about the next meet, a camp, which is to be held on 6th and 7th of December. It includes conferences on Clean India, Sustainable Environment and Organic Farming. He also informed about the bus facilities, the places we are going to visit and about the activities we are going to carry out. Then he terminated his talk.

Shri.P.Gopalan, Headmaster Rtd, gave us some guidelines to write report orderly. The title of the report must include KAP, Young Scientists Program 2014-2015, the venue and then the date. Include your name in the first along with the heading mentioned above. When you write your report, it should be written with reverere. Ensure that the names are spelt correctly with their degrees. Along with the name, their position should also be

included. Write without grammar mistakes. While writing the report include when it started, who inaugurated it, what happened and finally the conclusion. The conclusion should express your sincere thank to KAP for providing various rare opportunities.

Shri.Mangavilai D.Rajendran, All India Radio Nagercoil, then fed us with information on Study Trip. The study trip from Nerodi to Vattakottai is to create awareness among us on Nature. We should protect our natural resources for our future generation also. For the past few years we are destroying the natural resources without understanding that once destroyed nature's beauty cannot be repurchased at any price. He said about many places like Arokiyapuram, Vattakottai, Leepuram, Kanyakumari and Kovalam. Arokiyapuram is Kanyakumari's ideal beach resorts. Vattakottai is next to Arokiyapuram. It was built in the year of 1740 by King Marthanda Varma. There is a slope built in the kottai and in olden days due to high sea level, the sea water flowed till the slope and so it was used for easier transportation of goods and to escape from enemies easily. Here several colors of soil and rocks with green mosses, oyster and an extinct animal tortoise are also found. Next to Vattakottai is the Leepuram. We can view a port with light house there and this is the specialty of the place. When we walk along the shores of Leepuram we reach Kanyakumari Sea where three seas join. From here we can also have a spectacular panorama of sunrise and set. Kovalam Sea has white sand surface but man due to his foolhardiness us placing stones to stop in a wrong belief that through this sea water inflowing the land would be vetoed. Nowadays due to the increase in the sea level of Kovalam Sea, coconut trees which were previously present in the seashore has gone astray.

Due to the force and the direction of the wind from east to north, we find less forced sea waves in the east and dangerous, aggressive sea waves in the north. The continent of Kumari is the place where man first emerged. Sir also elucidated the cause for tsunami in Kanyakumari in the year of 2004, December 26. One raison d'être is because of the forceful sea waves. Another cause is because of the earthquake at 16000 feet below the sea in Sumaria. This caused tsunami in Kanyakumari. The speed of water below the sea is 800km and so there no damage is caused to the people sailing or travelling in the sea, only through the surface. During tsunami, places near the rivers, lagoon that joins in that particular sea is open to severe damage. In 1000 legs fort presently only one leg is left out and the remaining are being swallowed by the sea.

'Nature has everything for man's need but not for his greed'. Nature does not do any deception to us. Similarly to shield the sea waves from entering the land, sand ridge with a height of 50 to 100 feet were present naturally. But man due to his greediness has destroyed the natural defender. Pandanus tectorius (screw pine) is also another natural bulwark that holds sand firmly and so it cannot be inclined even by seawater and elephants. Black soil present below white soil in sea has radioactive effect and so the substances present in it can be used for nuclear energy production. Everything done has an equal and opposite reaction. When sea water is being retreat it will come out with a

higher force. In the year of 1883, October 26, there was a tsunami in Kanyakumari District. There was no loss of life due to the presence of sand ridge.

In places of higher density of salt, life of aquatic animals is not found. In places where the river meets the sea, density of salt will be less and so aquatic life exists. In seas that are shallow with less forced sea waves, fish's house that is the coral reefs are formed with the dead remains of aquatic plants and animals. The aquatic animals that live in seas come to the rivers to reproduce and then return back to the sea. He shared some points on a wiping out animal, the tortoise. It purifies the waste products in sea. The crabs which were found commonly in the seas in his childhood days are very rarely found nowadays. We should be very grateful to God for having created the seawater with salt or else we will pollute it just the way we pollute our rivers and lakes, he added.

He also gave explanation on Water Cycle from evaporation to the precipitation of water. In a sunny day, the waters of the sea are evaporated and then condensed to form clouds. Clouds with the presence of water are usually blackish ash in color and when a hole is deposited to the cloud due to the moving wind, the water stockpiled comes down during the process of precipitation in the form of rain. The rain usually falls in mountainous region and the water flows in the form of rivers and finally is mouthed to the sea. In olden days there was a connection between two lakes or ponds. But in this present day, we don't find it anywhere and so the lake or pond is in between boundaries.

We, the people of Tamil Nadu are blessed with all the types of land including kurinchi, mullai, marutham, neithal and palai. Though we are gifted with all these, we are not sustaining them but instead polluting them. When we think about Sustainable Environment, we are maintaining a sustainable forest. Our mountains are best suitable for Coniferous type of trees but we planting Eucalyptus Trees that don't suit our climates. Even after frequent instructions, we are again planting those trees and are using the parts of the tree for medicinal purposes. Though it was notified to all regarding the poisonous Parthenium Plant, no one has come forward to discard the plant. This plant was imported to India along with drugs from foreign countries. Even cows and goats do not graze on them. His talk made me understand how we people are changing our environment form a better side to the worse side in term of development.

In olden days fresh water flowed in streams whereas today industrial wastes with chemicals like Sodium Chloride (salt) surge in the rivers. When this chemicalized water is irrigated to the crops, the friend's of farmers, the earthworm, and the bacteria present in the soil dies making the soil infertile. When the salts present in the soil are absorbed by the plant the plant's yield becomes insanitary. The plants succumb will be hale and hearty only when the natural wastes given off by the earthworm with all the indispensable nutrients is rapt by the plant. We should also avoid the usage of fertilizers as they contain salts in them that kill bacteria and earthworm. Just as 'Too much of anything is good for nothing', when too much of salt is consumed y us also it becomes dangerous. Kidney and skin are the organs responsible for the emission of too much salt

present in the body. When too much salt is needed to be given off then it will cause kidney failure as small salt particles stick to it.

There are nearly 72 different types of rice. Samba rice, the traditional rice type preferred and chomped by the people of Tamil Nadu, eaten along with its husk is very useful to control sugar and cholesterol. Please note that eating the polished samba rice is not advantageous but eating along with its husk is useful. Then he came to the topic of natural spots. Mountains are one of the natural elevations and they should not be broken down for stones. Rather than that by digging 20 feet in the seashore we will come to know the existence of stones. Sand of river usually consists of fresh water. River sand that act as filters are being mined by sand miners. Bygone days, people even had signs to indicate and understand the presence of groundwater. Ground water level increases during rain. 'Health is wealth' is a well-known proverb. 'A healthy outside starts from the inside', said Robert Urich. This means that if we want to remain healthy wherever we go, we must start to eat healthy food and that can be began from our house by sustaining a Home Vegetable Garden than planting cactus for beauty in our house. Here we should only use natural fertilizers rather than artificial fertilizers a lead a healthy life. He concluded saying his talk.

Shri.P.Gopalan thanked Shri.Mangavilai D.Rajendran for his informative talk and thus proving himself as a book of knowledge in diverse topics. He then formally requested Dr.Y.Arul Prakash, Associate Professor Government Medical College Nagercoil, to address us.

Dr.Y.Arul Prakash said that we will be taken in the region of the medical college to show us vital functions and departments. He lectured us on **PSYCHOLOGICAL ASPECTS OF MEDICINE**. He is a psychologist and this deals with the diseases of the mind. Destruction of mind leads to diseases of body. Too much smart, punctual and orderliness leads to tension. If we cannot keep up time properly some unexpected events may occur and so leads to tension. So be punctual, orderly and smart, but only to a limit as 'Too much of anything is good for nothing'. People with three type of personality are there on Earth.

- **Type A Personality** - Very punctual, strict and carefully follows the rules. Suits arm forced jobs. They will be easily affected by heart related diseases, anxiety, depression and stroke.
- **Type B Personality** - Flexible bur not rigid. Don't mind rules. Adjust to all type of situations. They are certainly better than Type A because it is not so open to diseases. Though it is better than Type A, it is not an ideal personality.
- **Mix of Type A and Type B** - Be punctual but don't always worry about it. This the best type of personality because every situation will not be the same and we will have to react differently to each situation.

Stress is of two types:

- ✚ **Eustress** - It is a positive stress and brings something good out of us by motivating us to work whole heartedly. One with eustress bothers a little about problems and

propels in a positive direction to give out positive results and come out with flying colors because it will not cause any deviations when you work.

- ✚ **Distress** - It is a negative stress. It makes one very anxious by disturbing one's concentration and leading to health issues like bronchial asthma, skin problems, heart problems cerebral vascular problems and many more.

Everything in our world is not ideal so stress will automatically follow us in every situation. To overcome stress, do your works on time and control it with the assistance of your overwhelmed mind.

Our mind is of three compartments: Id, Ego and Super-Ego. Id means no fantasy and wants to achieve the thing once thought. If achieved they be on seventh heaven. If it is not achieved they are down in the dumps. This character is normally found in children. Ego means reality based operational mind and this moral fiber is normally found in adults and students. Super-Ego type of attribute is normally brought into being by grandparents. They have health allied thoughts and finally answer as NO to all things that come across their life. He made the concepts clear by giving instances. Ego Defense Functions speak about the mind's operation to certain mechanisms. Immature defenses deals with problems in a childish way whereas mature defense deals with it in a humorous manner.

'You can't live a positive life with a negative mind'. To keep oneself fit and positive mentally he gave us some easy tips.

- 💧 Have healthy food in proper time to keep mind healthy and active.
- 💧 Have good sleep at least 7-8 hours because growth promotional hormones secrete at night mainly during darkness. Rational metabolism rate comes down when you sleep.
- 💧 Take good and adequate exercise regularly for a minimum period of 30 minutes. It can even be individual exercises like skipping, jogging, walking or even swimming.
- 💧 Talk to people (May it be friends, family or neighbors) Instead of having 1000 friends in facebook have 10 friends in your locality to whom you can share your joy, sadness and anger. This improves self-confidence and promotes to a stress free life also.

Thus he finished off his natter. His talk was not only informative but also praiseworthy and was inspirational. Gby Atee gave the feedback. By the time Dr.Durai Gunasingh, Dean Government Medical College Nagercoil, disembarked. Mr.Mullanchery M.Velaian gave the welcome address and made a gesture one and all gathered. With the presence of the eminent personality, Gby's birthday was celebrated with gusto. It was nice yening her birthday wishes as Young Scientists of KAP. Mr.Velaian then handed over the mike to **Dr.Durai Gunasingh** to tackle us.

Training Program on Medical Science is a golden moment that we are sanctified with, he said. People consider that mugging up capacity decides our future. To succeed in the noble

profession of doctor, practical learning (That is to learn, to see, then have a life long experience) is significant just the way Thiruvalluvar has said.

கற்க கசடற கற்பவை கற்றப்பின்
அதற்குத் தக

நிற்க

That is why schools have activity based learning nowadays. He terminated congratulating to benefit from this program.

Next was the turn of **Dr.A.Jayalal**, Associate Professor Government Medical College Nagercoil, to deepen our knowledge on **COMMUNITY HEALTH**. He welcomed all of us to the college. Medical profession is teamwork. **TEAM** stands for:

Together
Everyone
Achieve
More

Diseases are of two types:

Communicable - This type of diseases spread. In India there are 33% of communicable diseases. These diseases can be prevented by doctors.

Non-Communicable - This type of diseases do not spread. In India there are 67% of non-communicable diseases because of chemical industries. To prevent these diseases every individual should take responsibility by creating awareness. Cardiac diseases, respiratory diseases, cancer and diabetes are the 4 main non-communicable diseases in India. These diseases are caused by four factors

- ✳ Alcohol (The average sale per day in Kanyakumari District is for Rs.2 crores)
- ✳ Smoking (It is the worst habit and is also a terrorist. Cigarette smoke cause only 5% of damage to the person who is smoking but cause 15% of damage to the person standing next to the person smoking)
- ✳ No exercise (It is the bad habit next to smoking. If you do not exercise its will make you lazy)
- ✳ Eating of junk food (Junk foods have high calories. Instead of taking these dangerous foods, eat more fruits)

He then concluded saying 'Health is the physical, spiritual, mental and social well being. He welcomed all once again to the college. Then Gby gave the vote of thanks. Then Mr.Velaian thanked Dr.A.Jayalal for giving awareness on Community Health. Then we started our campus visit.

First we visited the **ANATOMY MUSEUM**. as soon as I saw the name of the room as a museum wordings of Washington Post that states 'A museum is visually beautiful and we would certainly have fun' struck my mind and this made me eager to the museum. There I was able to see skeletons, scapulas, sacrum, elbow joint, tarsal and metatarsal joint, bones of the body, head and neck, nerves, brain, middle ear, intestine, thorax, liver, abdomen, heart, lungs, embryos, kidney and many more. There we were guided by **Dr.Lenin**.

Then we went to the DISSECTION HALL where **Dr. Vinovictor** directed us. He gave us information on Embalming. It is the preserving body technique in chemicals like formalin, sodium chloride and glycerin. Then Miss.Lekshmi gave feedback and Vote of Thanks to the guides.

Next we entered the FORENSIC MEDICINE MUSEUM where we came across many types of dead fish, types of fracture, decomposing changes (images), hanging ligature mark (images), dead reptiles and poisonous plants. Here the basic medical knowledge is used in the administration of justice. During Optus, postmortem examination, doctors assess age, give opinion on sexual assault, examine bones, examine injuries, time of death, find DOB for judgment judiciary and find out cause of death if it is natural or unnatural. If it is unnatural they find out if it is suicide attempt or an accident or homicide and then find out the weapons used to murder. Then we clarified our doubts. The weight of the bones of a female is less when compared with a male. According to the height of the people height of bones varies but width of the bones does not vary. For women after 45 years old minerals in the bones are lost leading to weak bones and then prefer calcium tablets. If a body is in open are like forest, it will be skeletonised easily; if a body is buried then it takes nearly 2 years; if a body is placed in coffin and then buried then it takes more than 2years: in deserts people follow a modified way of decomposing, mummification.

To calculate the time of death they determine the time of brain death. First brain death

Tissue death (after 8 hours)

Cellular death

Heart death

Correlate the time to come to a conclusion of time of death. After brain death organ transplantation can take place. Pupil of the eye should be transplanted within 6 hours or else it will go stale. In olden days bodies of saints were preserved. Miss.Jeswini gave feedback and thanked **Mr.Rajesh** for having clarifying our doubts.

Then we had a look at the PHOTO THERAPY ROOM. There **Dr.Kannan** and **Dr.Prajeetha** guided us. Melanocyte is a disease with some problem with the skin. When UV Ray from the equipment of Psoralea falls on the parts of the skin affected, then it promotes to the increase growth rate of cells. When the rays fall on a normal person it promotes to the increase in the number of cells leading to cancer. There are two types of UV ray that can be showed:

UVA: High wavelength, better penetration and is used to show on limbs.

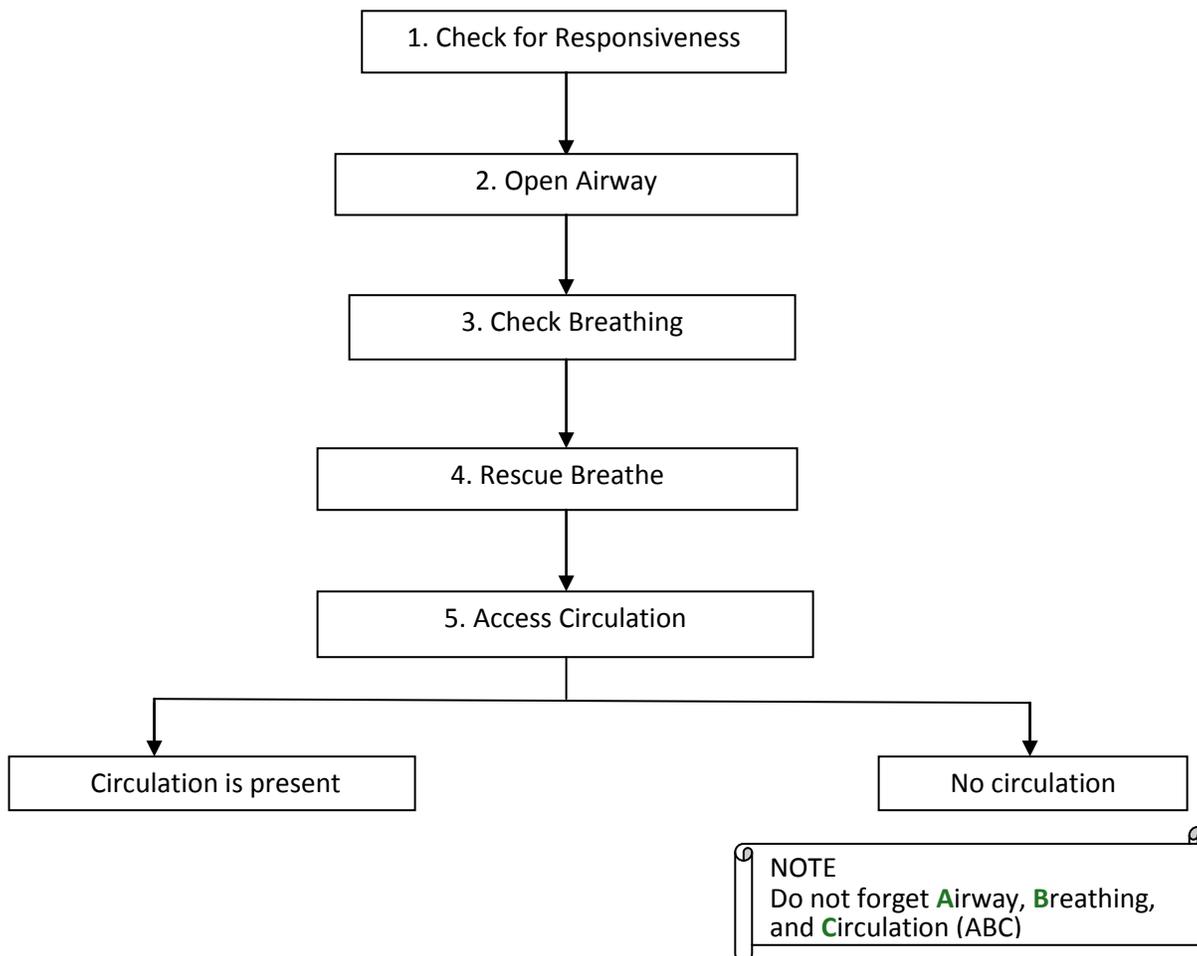
UAB: Cause fewer disadvantages, shoed on faces and on body.

Eyes should be protected when the ray is shown. A patient should be shown at a maximum period of 30 minutes. Even hair problems will occur but the rays do not cause too much of damages to it. Miss.Lekshmi then thanked the guides for explaining it in a very easy and clear way.

Next we went to the MINOR OPERATION THEATRE. The theatre is not well equipped like the major one, said **Prof.Dr.Rajkumar**, who guided us. This theatre consists of a staff room and a hand wash area to keep them sterile. Inside operation theatre, they are

supposed to wear a separate dress and should wear gloves. Even to wash the theatre 6 procedures should be followed. To not let the shadow fall on the object an equipment of multi-parameter is used. He explained about various equipments like endoscopy, cautery that are used in the theatre for operations.

Then we went to the Additional Clinics Block. Under the guidance of **Dr. Debin** and **Dr. Edward** we went to the DEPARTMENT OF ANESTHESIOLOGY. From vital science we can easily understand that consciousness, pulse and breathe is necessary to sustain life. We can revive a dead person to some extent. For this Advanced Cardiac Life Support ACLS (done by doctors) and Basis Life Support BLS



(done by everyone who knows the correct order) helps a lot. For BLS the following steps should be taken in order only after ensuring if it is needed to do so.

1. Assess whether the person is responsive by gently shaking the shoulder and asking 'Are you OK?' If YES come to a conclusion that the brain is working. If NO go to step 2.

2. Head lift and chin lift to elevate the tongue way from throat. Go to step 3.
3. Assess breathing by the processes of Look, Listen and Feel. If YES turn the patient to the recovery position. If NO follow step 4.
4. 2 times head tilt, chin lift, pinch nose and then take deep breath and give artificial breathing to see the chest rise.
5. Assess circulation by feeling the pulse on the neck. If YES continue rescue breath till the patient revives. If NO do cardiac compression. Compress the heart between two hard solids so that the blood is pumped to the brain. Then again continue rescue breath 30 times and 2 times cardiac compression.

Call the ambulance when the incident has happened. Do not spray water on the man or do not feed water to the man who is unconscious. He also showed us a video to make us understand the procedures clearly. Then we students were opportunity to do the above mentioned steps. Abina thanked him for guiding us.

Then we went to the Examination Hall to have our lunch. Then at 2:30 we assembled to continue our Training Program. Mr.Mullanchery M.Velaian said about our forth coming meets once again and then dispersed us to our respective groups. In our team the discussion had the attendance of all the members, team coordinator, team supporter and talent motivator. Our talent motivator gave us some guidance to write the report in order and solicited us to be more communicative and interactive. Then we conversed about the Study Trip to the Seaside and about the notice we were supposed to prepare. Finally the address to which the thanks letter should be sent was given. Afterwards we gathered again at hall for the continuity of the session.

Er.A.Benzigar Rajan, Deputy Manager ISRO Propulsion Complex Mahendragiri, gave a tongue and proved himself as a manuscript of Places. There is a length of 68 kilometer from Nerodi to Vattakottai. In this 68 kilometers itself 26% of Tamil Nadu's fishermen live because of the presence of lots of fish. An estuary is the tidal mouth of a large river, where the tide meets the stream. Kaveri, Vaigai, Tamraparni, Periyar, Pennar are the 5 major estuaries in Tamil Nadu. As 3 seas join in Kanyakumari, there are about 200 different types' ion fish that we eat in Kanyakumari District. Vattakottai is popular for shark. There are normally to types of sea shores.

- * Seas with no rock but has the existence of sand
- * .Seas with the existence of rocks

nghopKfk; is a place where the sea and the river meets. Here the water level is less. There is no wave here. AVM Channel had watery transport but now it is a drain due to water pollution. Then he ceased his words.

The meeting came to a conclusion with the singing of National anthem. This meeting was something different than the other meetings because the chance of viewing

museums that was not even given to the parents was given to us. I was able to see the organs that we all have in live rather than an image of it. Even this meeting had given the confidence and motivation to become a doctor. I wish we will have meetings and training programs like in the near future. In this report I would like to extend my deep sense of gratitude to all the members of KAP and the medical college for giving this golden moment.

**R.J.RESHMA,
MAROON TEAM LEADER.**

“The art of medicine consists in amusing the patient while nature cures the disease”.

-Voltaire

We gathered in the examination hall at 8:30 am. The arrangement of chairs and tables impressed us and we had a feeling of going to write examination. Mr.Mullanchery M.Velaian, the organizer of KAP, came forward and stressed few points about our reports. He had given a time limit for each school. Time limit is only the border and we shouldn't stick in the border always. We have to send it in advance if possible. He gave few tips about how to save our word file. Our file name should contain our name first and then there should be a dash and the topic of the training programme. Then again there should be a dash and then our team name should be written. This is the format and we should regularly follow this whenever we send reports. The reports should be written and send by ourselves and not by any computer centers and schools. We should contact our team coordinators and inform them after sending our reports. We can also contact our talent motivators to correct our reports, he said. Then he informed us about the coastal awareness camp which will be held on 27th and 28th of December. It's a visit from Vattakotai to Nerodai. We are supposed to prepare 500 copies of notice for each team based on the following five topics:

- ▶ Save sea resources
- ▶ The tourist place which have to be protected
- ▶ Save fresh water resources
- ▶ The estuaries which have to be protected
- ▶ Sea shore cleaning

He also informed us about the camp on 6th and 7th December. We mainly have three important programmes there. They are the organic farming, sustainable environment and clean India. He told about the transportation facilities from Marthandam bus stand at 6:30 am and from Nagercoil Udupi hotel at 7:20 am. We were instructed to bring a 20 kg rice sack for one pair to do the clean India programme. The clean India mission will be done in Nambi koil. He said that the meeting will be beginning after the clean India programme. Few titles were given to the young scientists students to speak in the

conference. He told us to keep a water bottle with us, a pair of dress and a rice sack. We will be dropped in Marthandam bus stand at 6:00 pm, he added.

Then Shri.P.Gopalan, administrative officer of Excel Central School, gave us some instructions about how to write the report. He said that one report was sent to him without name. We shouldn't write like that, he told. He said the format of a report. First Kumari Arivial Peravai should be written. Then young scientists programme 2014-15 should be written. Then the venue, time and date should be written below. The dignitaries name can also be included. The person's name should be written correctly with qualifications. His/her position should be written. This type of format in report writing skill will be useful in our future life. We should know their degrees so that we can annex it before their names. He also told us how to give commas after and before names. Finally, he ended his speech by saying thanks to KAP for giving opportunities to grow such skills.

Next Mr.Mangavilai M.Rajendran, AIR, spoke to us. First he wished all of us a fine good morning. The topic 'Sustainable environment' has been given to us to protect nature mainly for two reasons. One reason is to protect it for our future generations. The other reason is that it is continuously being destroyed. He began his talk about coastal areas by saying the neighbours of Kanyakumari Sea. The seashore villages have been widened from Arokyapuram to Neerodi. The Vattakottai fort was built by Marthanda Varma Maharaja in 1740. There are many facilities to stay inside the fort and there is a slope in it. The specialty of this is that is beside the sea. There are many varieties of sand and we will be able to see the sloppy small rocks with mosses on it, mussels, shells and other sea creatures in the sea. Leeburam is a place which is known for the light house in it. It is a very old port. The pillar can be seen still. Tortoises were found abundantly on sea shores but now it has been eaten by the people living there. Fishing ports are there on way to Kanyakumari. He listed few tourist places near to Kanyakumari. He said some tourist places in Kanyakumari like Vivekananda memorial rock, Thiruvallur statue and so on. Kovalam has salt marshes in it, he said. We put big stones on the sea shore to prevent se water entering inside the coastal villages. These have destroyed the natural beauty of sand. In south, the waves are less but in north, they are more. The reason is that the wind blows from west to east. So in south, the wave goes inside the sea but in north, it comes to our areas. He explained how the direction of wind is related to the sea waves. He shared his incident with us. Before ten years, he went to Thenkappatanam. There he found coconut trees. But we he visited the same place after ten years, they were all missing. The reason was that they were carried away by the waves of the sea water. So constructing big stones is a waste. He asked us if now a doubt arises in our mind. The doubt is that if sea waves come forcedly like this, then will K.K. district be alive? He told us an incident about Kumari Kandam which is known as the birth of civilization. The tsunami which attacked us in 2004 was caused due to an earthquake of 16,000 speeds in Sumaria. This destroyed the land of Kumari Kandam and it drowned inside the sea. There

will not be any reactions or identifications on the surface of the water if any strong earthquakes occur in the deep sea. For this he told us an example. One person parked his car on the sea shore and began walking. At the same time, a boat was sailing on the sea. After few minutes when the person came, he couldn't find his car but the ship was sailing. The car was missing because sea waves have taken it in. The Manarkudi backwater was widened in one time because of many rivers flowing and joining it. But now it has become small. Wherever rivers joined seas, there will be a great destruction. He said about a place known as Ayirankal(thousand legs). It was known so because many waters from it joined the sea. But now it has only one leg and there is lack of water there. He also said us about the Muttam Sea. Nature has never been an enemy to us. Nature creates big sand dunes to stop sea water entering into villages. We people have dug more sand from sea shore and the sand dunes are not found now. So water comes easily to the villages. We have destroyed the natural sand dunes of 50-100 ft. Chothavilai beach was destroyed once because of destruction of sand dunes. He told few trees which help us in stopping sea water entering inside sea shore villages. Punnai is a kind of tree. Two types of this trees were found on the sea shore. Thalai tree is a very strong tree because it spreads its roots over a very large are and act as a protection for sea shore villages. It can't be even carried away by an elephant. The varieties of sand found in Kanyakumari district is are highly rich in minerals. The surface of the sand was treated and soaked and they made them as ropes. When the ropes were exported, they found sand falling out of that. From this they found that the sand is rich in minerals. Then he told about the tsunami attack on October 26, 1883. There were only very less people on the sea shore and they lived behind the sand dunes. So there was very less damage. In 1984, it was conformed that this incident happened really. Next sir told about fish. Fish will not reproduce where the density of salt is more. But sea water has more number of fish because more fresh water drains into Bay of Bengal. This reduces the density of salt. Coral reefs are the homes to fish. If we destroy the coral reefs, then the population of fish will decrease. He told us few examples too. Fish comes to backwater to lay eggs often. Tortoises lay eggs on the sea shore, and then it goes inside the sea. They play an important role in cleaning the sea shore areas. Crabs are being decreased now and many natural creatures are not found nowadays. God created sea with more density of salt so that we humans will not pollute them directly like our ponds and lakes. There were 4,000 ponds in Kanyakumari district and now it has been reduced to 1,500. Fields and forests are found in our district. He told us about the cauli flower type of forest where the sunlight can't even penetrate in to the forest because of its highly thick trees. He told that rainy cloud will be transparent but will contain water in it. When wind dashes them, rainfall comes out. We are destroying forests. He narrated few incidents. British found that there was abundant of water in Ooty and so they brought eucalyptus tree to take away all the water sources. Now Ooty has more number of eucalyptus trees and less water. Parthenium is a poisonous plant. But it is found everywhere in our district. In 1960 wheat was exported to

our country in large amount. Along with this, the plant also came. The plants which the cattle do not graze are definitely poisonous. Before 30 years, the water was very clean in such a way that all the fish can be seen from outside. Fish consume natural waste. When Green revolution began, ponds and lakes filled with waste. Bacteria can't be alive in such situations because the water becomes salty. Our health has too damaged. Our food turns into glucose when gets digested. So hospitals began providing glucose when the patients were sick. Similarly, Israel scientists found the source from where the trees get salt. The answer is that the earthworms and bacteria around the trees give them salt. He explained the method hoe to test it by taking the fine powder from earthworms and keeping it in sunlight so it shines in different colours. Kidney and skin separates salt in our body. But when poisonous toxic wastes enter our body, the kidney can't function properly and leads to kidney failure. Commonly people are affected by sugar, cholesterol and pressure. This is because we consume polished rice. The people who consume rick with husk are healthy. Andhra Pradesh exports polished rice to Tam8il Nadu at the same time rice with husk to Kerala. River water gives us fresh water. Rain water fills the water table and increases the underground water level. Then he said about bird fever. Many check post allow tucks with waste from other states to dump it in our country by receiving money. Today all the agricultural fields are being converted in to industries and homes. Putting sand over agricultural areas is similar to putting sand over our rice. So all the natural resources should be protected and it should be converted in to 'Sustainable environment'. He ended his talk.

Then Shri.P.Gopalan welcomed Dr.Arul Prakash, Associate Prof. of Psychiatric, Gov. Medical College, Nagercoil, KAP young scientists' team consultant & President, TNGDA Kanyakumari district. He wished us a very fine good morning. He said that he has been a member of KAP for nearly 5 years. The purpose of us to gather there was to learn more about medical sciences. His specialty is psychiatry. It is a study based on the diagnosis treatment of diseases of mind. He gave us a talk on the topic 'Psychological Aspects of Medicine'. He raised us a question. When will be free from tension? Shree Meera Subramaniyam replied that if we do our works properly and punctually, we won't be tensed. He accepted her answer but said that too much of punctuality, sticking to the laws properly all these leads to tension. He told about two types of personalities- Type A personality and type B personality. Type A personality will be very punctual, very strict and stick to the laws and rules strongly. Type B personality will be flexible always and not rigid. Type A personality suits to arm forced jobs. He said that type B personality is better than type A personality. We should be punctual but shouldn't worry about punctuality. We should be flexible and shouldn't be stressed. Type A personality commonly get stress induced problems like heart attacks, strokes, depression, anxiety neurosis and so on. For type B personality diseases are very low but he is not an ideal person too. He again raised a question to us. Is there any good stress? Then he explained us about the two types of stress.

✓ Eustress : positive stress

It bothers us a little and propels to go in a positive direction.

✓ Distress : negative stress

It makes us work. We get problems like wheezing(asthma), skin problems, heart problems, cerebro vascular problems etc.

Next he told us something about how to overcome stress. If the world is ideal, there is nothing to go wrong, but things are not ideal. So definitely stress will be there. Handling stress is done by mind. Mind has three compartmental systems. They are:

- ▶ Id
- ▶ Ego
- ▶ Superego

He told us to imagine an ice cream parlor and a child with his father is going near it. The child cries to get an ice cream for him. But father refuses. The child is just acting on fantasy without reality. This is known as 'id'. In the same place of the child, if we go, we will be able to understand what our parents say and act accordingly. This is known as 'ego'. Superego can be suited best to old people. They used to advice very much and they don't even look at it. Mind operates certain mechanisms. They are called as ego defense functions. They are of two types:

Immature defenses:

This defense is very childish behavior, no reality and they may lead on to some problems.

Mature defenses:

This defense is a reality based one, humor (picking things in a jovial manner) and leads no problems.

If we apply some mature defenses, we can be free from stress, he said. Above all, we have some positive mental health tips. The young scientists answered few of the below points:

- ▶ Free from stress
- ▶ Cleanliness
- ▶ Think positive always
- ▶ Take things in an easy manner
- ▶ Accept failures
- ▶ Hearing jokes
- ▶ Tomorrow is always there and so on.....

Sir told few points:

- Good food: We should eat good food and should always be healthy. Don't avoid breakfast and lunch. Avoid non-vegetarian items.

- Good sleep: Sleep to minimum 7 to 8 hours. Growth promotion hormones will get secreted in night, especially in darkness. Rational metabolic rate comes down in sleep. God created day to work and night to sleep.
- Good exercises: We should try to do some personal exercises like skipping, jogging, swimming, walking etc. This can be done up to 30 minutes or 1 hour.
- Talk to people: Spend more time with family members. Attend happy and sad family events. Talk and spend time with grandparents. Visit grandparents once in a week and get their blessings. Keep touch with our neighbours. He said that instead of having thousands of friends in social networks, it's better to be friendly with at least ten people in our neighbourhood. It will give us more self- confidence. Don't give place to a situation known as loneliness.
- Good principles: Follow good principles always. It will make us to go in a right path.

If we apply the above mentioned steps, we will have stress free life. By saying this he ended his speech. It was the turn of green team member to compeer the session. Gby Atee, green team leader welcomed all the dignitaries. She told a short feedback on the previous speeches. She welcomed Dr. Durai Gunasingh, Dean Govt. Medical College, Nagercoil, Dr. M Rathakrishnan, Medical superintendent Govt. Medical College, Nagercoil and the organizer of KAP, Mr.Mullancery M.Velaian. Gby Atee welcomed Mr.Velaian to give away the welcome address.

Mr.Velaian welcomed Dr. Durai Gunasingh on behalf of KAP. Gby Atee gave him the last year's KAP book 'Nurture nature'. Then he welcomed Dr.Arul Prakash, Associate Prof. of Psychiatric, Gov. Medical College, Nagercoil, KAP young scientists team consultant & President, TNGDA Kanyakumari district, Dr. Jayalal, Associate professor of Surgery, Govt.Medical College, Nagercoil, guide teachers, consultantns and all of us. Then we heard happy news. It was Gby Atee's birthday. All the green team members came forward. We all together wished her a happy birthday. She cut cake front of us and also distributed it to the dignitaries. Then Gby Atee welcomed Dr. Durai Gunasingh to felicitate the gathering.

He wished all of us a pleasant good mourning. He said that it was a great pleasure for him to participate in the meeting. When he was studying, he had never gone out of the school even a single day. He just goes to school and mucks up the data. Even now mucking capacity, intelligence and cut off marks decide our future. He mentioned kural It was a well known kural so we all joined him when he began the kural. He saw our activeness and appreciated us for being good in saying kural. We have to learn everything thoroughly and apply it in medical science, he said. He said that last year's topic 'Nurture Nature' was good. Practical learning gives us a lifelong experience. He said about activity based learning method too. Nearly 200 doctors, 400 staffs and nurses are working in the hospital. He had a plan to conduct a medical exhibition but unfortunately due to some reasons, he couldn't. Doctorate is a noble profession, he added. He wished us and KAP a

great success. Gby thanked him. Next she welcomed Dr. Jayalal to give a talk on the topic 'COMMUNITY HEALTH'.

He began his speech by telling some features of the medical college. It is a very big campus of 100 acres. It has an eco-club. It is a beautiful campus with lot of trees. Many varieties of birds are found inside the campus near the forest side areas. Everyday 2000 people come for treatment and everyday nearly 30 surgeries take place. It is superior than any other medical college because there is a very big team behind it. 'Together Everyone Achieve More' is the expansion of TEAM, he said. Then he came to the topic. Diseases are of two types.

Communicable diseases: It spread from an infected person to a healthy person. In India, 35% of people die due to this type of diseases.

Non-communicable diseases: It doesn't spread from one person to another/. In India, 67% of people die due to such diseases.

He said that doctors are required to cure communicable diseases but non-communicable diseases should be prevented by us. He listed four main non-communicable diseases.

- ⊕ Heart diseases
- ⊕ Respiratory diseases
- ⊕ Cancer
- ⊕ Diabetes related diseases

We can prevent such diseases by following the given things:

- ⊕ No alcohol
- ⊕ No smoking
- ⊕ Exercise
- ⊕ No junk food

Smoking kills people. Only 15% of the smoke goes inside the smoking person and 85% of the smoke goes to the nearby people. He said that they are the terrorists who kill the people. Nearly 2 crore rupees are spent for alcohol in Kanyakumari district in one day. Then he said that serials are dangerous. People don't care about who comes inside the house and goes outside the house. He advised us to exercise regularly. One barotta gives 800 calories and one egg gives 100 calories. We should eat more fruit items. It's our duty to give awareness to the people not to drink and not to smoke. Next he gave us a clear cut definition of health. Health is defined as a state of mental, social, physical and spiritual and social well being. He said us to take care our health. He wished all the best for our future carrier and ended his speech. Gby Atee thanked him and also Government Medical College for giving us such a wonderful opportunity. Then at 11:40 am, we went to visit some museums, labs and hospital.

First we visited the 'ANATOMY LAB'. There we saw different human body parts which he students have preserved. We saw male skelton on either sides of the entrance. We saw scapula, human arm, forearm, mammary gland, sacrum, tendo calcaneus, foot, thigh, metatarsal joints, triceps surae, porta pedsi and so on. The next section consisted

of bones in human body such as phalangeal bones, skull, clavicle, ulna, sternum, ribs, radius, femur, tibia, hip bone, tarsal bone and vertebrae. We had a look-over the head and neck section which consisted of nasal septum, lateral wall of nose, muscles of facial expression and muscles of mastication. We saw ear and brain parts like cerebellum and tentorium cerebelli. We visited sections like nerves which had ulnar nerve and cubital nerve, intestine which had small and large intestines, thorax, liver, abdomen, heart, lungs, embryo stages and ileum.

After that we visited the 'DISSECTION HALL'. Dr. Lenin and Dr. Vino Victor explained few things about the hall. They preserve bodies in the lab using some techniques. The way how the blood will be entered into the body before preserving was also explained very clearly to us. A.S. Lekshmi gave a short feedback on their explanation and KAP book was given to them.

Next we had a visit to the 'FORENSIC MEDICINE MUSEUM'. The H.O.D was Dr. Rajesh. It was a pathology related museum. We saw different types of sea creatures, weapons, fracture images, animal bones, reptiles like king cobra and fish like eel, hyoid bone, liver and poisonous plants. Images of various kinds of suicide commitments and accidents were pasted all around the hall. Forensic medicine is also known as justice or law based medicine. They apply the basic medical knowledge to treat the patients. They help the police department in investigating some cases. He listed the steps about how to investigate or find the person's suicide or murder. First the autopsy will be taken. It means finding the cause of death i.e. whether it is natural or unnatural, whether it is a suicide or homicide or accident and the time of death. Then they will be assessing the age of the individual. They give opinions on it. Next they examine the bones and give opinions. They examine the injuries and give opinions and finally teach the students how to give opinions. Autopsy also includes finding about the injuries. It also helps them to find the weapons used, whether the person is left handed or right handed and so on. He said that some people will not have birth of baptism certificates. So they give some opinions which will be helpful for the judiciary to deal. Next it was the turn for us to clear our doubts. First Sree Meera Subramanian from blue team raised a doubt. She asked about the bone weight of male and female. Doctor said that the bones of females will have less weight when compared to the bones of males. The length of the bone depends upon the height of the individual. Females lose all the minerals in their bones after 45 years and the bone becomes osteoporosis. So the doctor will suggest some calcium rich tablets to them. Next Argineshya from yellow team asked a question- After death of a person, how many days will it take for the body to be skeletonized? Doctor said that if insects, foxes and eagles eat them, it will take less days for the body to be skeletonized. If the body is buried, it may take one or two years. If the body is kept inside a coffin box, it may take more than two years. If the body is buried in a desert, it becomes mummified which is a modified way of decomposition. Then Gby Atee of green team raised a question that how to find the time of death? He listed few types of death to find the time of death:

1. Brain death: The brain will die at first and the body parts can be taken for any transplantation purposes from the individual.
2. Clinical death: In this death, the heart will die.
3. Cellular death: After the cellular death, we can remove some body part like skin, hair and so on for transplantation.
4. Tissue death: After tissue death, there is no use of the body and none of the parts can be used for transplantation.
5. Decomposition

From all the above mentioned things, we will be able to determine the time of death. J.S.Edin Jijo of yellow team asked whether a dead person can hear after earth? He said that many people may have wrong opinions about such things. Different people may have different opinions and they may vary according to religions. Sourya Vijay from green team asked that after donating the eyes of a dead person, will he/she able to see? The doctor replied no. The former young scientist Ebi asked a question. The question was that the bodies of some saints still remain, how? The doctor replied that sometimes they may preserve the body. Next some students like R.S.Raksha from red team, and one yellow team member and blue team raised questions. The former young scientist Jeshwini gave the feedback. She thanked him and KAP book 'Nurture Nature' was given to him.

We visited 'NUM THERAPY ROOM'. Dr.Kannan showed us a machine which can treat some skin related diseases like leuco dermia using UV rays. Then we moved on to the 'MINOR OPERATION THEATRE'. Dr.Raj Kumar explained us about the theatre. Minor surgical cases will be operated there and stitches will be taken later, he said. The minor operation theatre is not fully equipped like major operation theatre. He showed us the area where patients wash the hands. The dress which the patients wear in the theatre is called apron. He told us that there are six steps for washing hands and then later the gloves are worn. He took us to the minor operation theatre. The patient's bed can be tilted and is known as the hydrolic table. Overhead shadow less lamp is fixed above the bed so that our shadow will not fall on the field. There are two types of such overhead lamps namely fixed and movable. He explained us about the anesthetic apparatus and pulse recording meter. Caudery is a machine which is used to seal the blood flow. This is mainly used when over blood flows from the body. Then he explained about machines like endoscope and suction apparatus. R.J.Reshma, the leader of maroon team, thanked him and the KAP book 'Nurure Nature' was given to him.

We left the labs and went to the hospital. First we had a look over the 'DEPARTMENT OF ANAESTHESIOLOGY'. Mrs.Thananlekshmi, Dr.Edward Johnson and Mr.Dibin helped us to know more about treatment. Dr.Edward Johnson raised us a question. When will we say that a person is alive? The answer is when he is conscious, breathing and then alive. This is known as vital science. Again he raised a question. Can we revive a dead person? Yes, but with certain extent. There are two types of life support. They are the basic life support which we humans can do and the advanced life supports

which only the doctors can do. Brain needs oxygen and glucose to make a person live. The brain can work without oxygen and glucose for maximum five minutes. The brain permanently dies beyond five minutes. He listed the three components of life support:

- ✓ Airway
- ✓ Breathing
- ✓ Circulation

He explained us clearly about this through a demo. A model of human being was placed on the table which made us to easily understand the matter. He also used the power point to show us the images. If a person is unconscious, the steps to follow are:

1. Gently shake the shoulder and see whether the person respond to stimulus. Ask him 'Are you okay?' If the person responds, the brain is alive. If he doesn't, he is still unconscious.

The person may not be able to breathe at that time because the tongue may obstruct air passing in to the throat. If so, tilt the head and lift the chin. So that the tongue moves away from the throat.

2. Check whether the person is breathing or not. This can be done by following this method:

Look-Look the movement of the chest.

Listen-Listen to the heart beat of the person

Feel- Feel the air when the person breathes.

3. Keep the person in the recovery position.
4. If the person doesn't breathe, give recue breathing. Tilt the head and lift the chin, pinch the nose and inhale. Then push the inhaled air from our mouth to the person's mouth. Do this process for two times.
5. Check the pulse rate of the person. This can be check on the groove on the side of the Adam's apple.
6. Then locate the rib cage. Place two fingers on the sternum for identifying the location. Then place the heel of the hand on the sternum and lock the other hand. Now push in and out. When you push in, the heart gets compressed and the blood squeezes out. When you push out, the blood rushes to the heart. Do this process or 30 times and do rescue breathing for two times.

He showed us a flow chart for better understanding. The former young scientists, A.S.Lekshmi, showed a demo with the human model placed on the table. She did the demo by explaining us. Many other students like Raksha, Nivedh Shankar tried the demo. S.Abina, the leader of red team gave the feedback. It was raining outside and the climate was good. So we didn't feel hungry because we had a very interesting session. We had a lunch break at 2:00 pm. Delicious food was served in the examination hall. We felt refreshed after having our lunch. The lunch break was over at 2:30 pm.

We had a reminder from Mr.Velaian about the camp on 6th and 7th of December. He instructed us to bring our breakfast and water bottle and told us not to bring carry bags.

He said that we would stay at Kings Matriculation School. Then he told us to be ready for speaking in the conference meeting. We had a group discussion. We discussed about the notice and decided the sponsor for 500 copies. We got some basic advice and instructions about report, management and discipline. The group discussion got over by 3:30 pm.

Er.A.Benzigar Rajan gave us a short talk. He said that coastal areas research topic is given to us to create awareness among people living in 68 km. There are 26% of fishermen from Neerodi to Vattakotai. This is because more fishes are available and this is due to five main rivers.

- + Tamirabarani - drains in Kuzhithyurai and the estuary is Thenkapattanam
- + Pazhayaar - flows from Chrulodu at Mahendragiri and the estuary is between up and down Manarkudi
- + Valliyar - Flows from Velli malai and the estuary is Kaliyakottai
- + Panthar - The estuary is Kolachal

Estuary is a place where a river and a sea meet/ Kanyakumari district has 200 varieties of fish. This is because three seas surround our district. There are more number of sharks in Neerodi and other ports. Sea turtles are also found. Marine creatures need a calm atmosphere to reproduce. He said that more tourist places are located near to sea shore and they have a number of coconut trees. He then differentiated between the seas which have rocks and rocks less seas. He said few tips to protect sea shore.

- ▶ Proper toilets and concrete houses should be provided to the people living on coastal regions.
- ▶ Household wastes shouldn't be mixed with the sea water.

There are more varieties of fish found in 10,000 hectares from Kanyakumari district. AVM channel was once used for water transportation. It starts from Manarkudi and ends in Kollam near Asdthamudi lake. He told that the fisherman fish based on the direction of wind. Then finally he ended his talk. National Anthem was sung. We had a short feedback session. The meeting got over by 4:00 after tea break. It was raining heavily outside. The meeting was very informative. The college surrounding can be taken as an example for green environment. We got more and more information about medical science. We got opportunities to have a view on the human body parts kept in the museum. I had never had such a good experience in my life. I express my deep sense of gratitude to Mr.Mullanchery M.Velaian and Government Medical College, Asaripallam for providing us such a wonderful opportunity.

..... THANKS TO KAP.....

**12.J.M.JERESHEA ,
MAROON TEAM**

The fourth meeting after the selection process of Kumari Arivial Peravai (KAP) was held at Aasaripallam Medical College on 29-11-2014 (Saturday). Firstly, we were seated in the examination hall of that college. The KAP meet was started sharply at 8:30A.M.

The program started by an introductory speech by **Mr. Mullanchery. M. Velaian**, the organizer of the KAP. Firstly he said us, "How to write a report?" and he said about the camp meet which is going to be held on 27th and 28th of December. The next meet of KAP is a camp regarding the topic "Clean India" which is going to be held on 6th and 7th of December (Saturday and Sunday), he added. He also gave information about the leaflets that are needed to be printed in order to create awareness to the public. He then concluded his speech and welcomed Mr. Gopalan to give some points to overcome the mistakes in our report writing. **Mr. Gopalan** said us to write a report He instructed us to start writing the report only after typing the particulars that he gave (as shown above). He also mentioned that we should write the personalities name with the correct spelling. The name of the dignitaries should be written in the format as "**Name, Profession**". He said that still now many of them even don't know the spelling of the name of Mr. Velaian. Then he added that if we are writing a personalities name in the report for first time we should write their names along with their professions. For example, if we are writing a name Mr.Mullanchery. M .Velaian, it is not enough. Instead of that we should write that Mr.Mullanchery.M .Velaian, the organizer of KAP. Then he said that we usually used to write Mr. James Wilson but he said that it was wrong. Since he is a Doctor of Philosophy (PhD), instead of writing Mr., we should write along with his profession that is Dr. James Wilson. Then he said that we should use the punctuation mark "," (comma) before writing their profession. Then he concluded his speech and welcomed Mr. Mangavilai Rajendran, who was working in All India Radio, Nagercoil.

Mr. Mangavilai Rajendran said that from the past 10 years our environment has being spoiled. He also asked that "Have you all had visited the sea?" All the students echoed YES but a student from yellow team said that she had never been to sea. Then they started saying about the sea. Then he said that in Vattakotai inside the depth of the sea there is a palace. He said that in his point of view, ancient kingdoms had many enemies so in order to protect themselves they had built this palace inside the sea. Then he also added that in this place we can see huge number of rocks. He said that in this place we have a light house. It flashes its light to guide ship at night. Next he noted the place Muttam. He said that this is a place where we gain enormous amount of fish. Next he said about Kovalam. This is a place where salt is prepared from sea water, he added. Next he said that, in Vattakottai the level of the sea won't raise so much but in kanyakumari the sea will raise too much. So, "Why the level of the waves differs at each other?" he asked to us. A boy, the blue team member answered his questions correctly. He said that, it is due to the wind that is flowing from the west to east. Next he said that, when he went to the area of Kadiyapatnam 10 years back, he could see too much of coconut trees around that area but when he went after 10 years he could not see the

trees again. When he asked about this to the nearby residents, the people replied that the sea had overcome the whole area as a result the trees all collapsed and of no use. So they had to chop the collapsed trees. Hearing this he said that we, humans are responsible for such violent climate change and this is the result of not protecting and disrespecting nature, he added. Then he said that due to Tsunami in the sea there caused a huge explosion inside the sea. This Tsunami waves hits the sea and raise at the speed of 800 km/hr.

Then also he informed that, nowadays there have been some changes taking place in Muttam areas. He said a short example, if we are moving on to a place covered with trees and there is no route and if we are walking for 3 days, obviously we will find a route on the third day. So this is how the British people found way to India. He also informed that we can see a large amount of sand in Muttam. Then he informed that, in those days we can see a large amount of Punnai trees. He also said that in these days also we can see this type of trees near the sea shore. Next he said that, Elephant can destroy all the trees but it can't destroy even a single Punnai tree. Then he said about the Tsunami attack which was held at 1883. He also said that it was great luck since the population of people living nearby the sea on that day was less. So the death rate on that day was not too more, he added. He also noted a song "Sinthu Nathiyi Misai" a sweet song which was being written by a great poet Bharathiyar. He said that in this poem the poet had denoted about the sea in about two lines. So we should think of the words he spoke there. He also said only in Kanyakumari we gain a lot of fish. In Trivandrum we could catch lot of fishes. But the residents of Trivandrum won't give a single drop of water from their sea why because they have a threat that they will lose their amount of fish what they are getting now. And he added that the people living there are very brilliant. Then he said that the people living near the sea shore have been increased. When the sky seems to rotate, it is the symbol for rain, he added.

Then he said that, the British bought Eucalyptus from their country to Ooty. Due to these trees only there they have a less amount of rainfall. Next he informed us about the parthenium tree, a poisonous tree. He informed us that in China due to this tree an enormous amount of people had been died. Next he said about some chemical plants that destroys the environment. He informed us that, when it combines with rivers or lakes it will destroy them. Then he said, by using these we are destroying ourselves why because, the Israel scientists had been discussed and found that there are many salt such as sodium chloride, calcium chloride etc... had been there in this poisonous plant. This plant will destroy the vegetables, fruits from the ground. If these harmful vegetables are being eaten by us (we, human beings), it would lead to kidney failure, kidney stone etc...

"To avoid this we should depend on Nature." He quoted. Then he said that, there are 72 types of Rice. To avoid cholesterol and sugar we should use rice named "Chamba". Then also he said some points about "Bird Flu". He advised that, we should plant more trees. He said that, in Kanyakumari district we are destroying the environment by

constructing more buildings. Then he said a small story that, in earlier days when he was small he was going to the field with his parents. His parents won't allow him to get inside the field along with his footwear. This shows that they respect their food products. By saying this he concluded his speech. Then Mr. Gopalan thanked him for his attractive speech and welcomed Dr. Arun Prakash, psychiatrist, Asaripallam medical college.

Dr. Arun Prakash said that a good treatment for psychological problems would reduce the diseases in our body. Then he asked us "How we get addicted to psychological problems?" Then a member from blue team answered that, "if we do our works properly and punctually we will be getting tensed and this leads to psychological problems". After hearing this answer from her he said a very understandable example that is, if we give our record note to our friend but unfortunately she had forgotten to bring it on the next day, we would get tensed because we can't do any homework or assignment given on that day. This leads to psychological problems. But instead of getting tensed, we should be strong enough to handle such situation.

Then he asked that Punctuality is good or not? We all echoed, "No". He said our organizer is so punctual. By hearing your answer as "No" are you saying that our organizer is a kind of irritating one, he smiled. And then he defined that, we should be punctual but our punctuality should not go beyond an extent. Then he defined that, the stress is classified into two types they are listed below:-

- Eustress
- Distress

He defined that, Eustress refers to positive stress. He also explained that, the stress that approaches positively it is known as Eustress or we can simply call it as useful stress. It also helps to work properly/positively. Then he explained about the word "Distress". He also gave a short example regarding that. The example is given below:-

Suppose by seeing our examination schedule time table in our school notice board we would get tense. Because of this tension we would lose our concentration. Also we can't concentrate our exams properly because of this unnecessary stress. This kind of stress is called "Distress". Next he said about, "How to overcome our distress?" Then he himself gave an answer that, all things in the world are ideal so stress will be there in the world, he answered. Next he explained about the following things:-

- Ego
- Super ego

Then he said a small story that, a child is moving along with his father in a street. The child asks for an ice-cream to his father but his father refuses. The child began to cry. If it is in the super market means that child will simply take the ice cream without asking the permission from anyone. This is known as ego. But if the child asks for ice cream to his grandfather means immediately he will buy or gives some advice to his grandchild. This is known as, "super ego".

To overcome stress he asked us to follow some characteristics such as,

- To think positive
 - Accept failures
 - By hearing jokes
 - To think, "Everything is positive"
 - To think, "Tomorrow is always there".
- He added some more points that,
- To eat food properly
 - To eat good food
 - To have good sleep (minimum 7 to 8 hours a day). Having a good sleep at night will promote the mind growth. Hence we should sleep well, he added.
 - Good and adequate exercise is very important (he advised us to perform some personal exercises). He also denoted that at least we should perform exercise for 30 minutes and for small children we should perform for 1 hour.
 - We should have self confidence. (We should have confidence in ourselves).

He also denoted by talking to people we gain a lot of confidence. By saying this he concluded his speech.

And then **Miss. Gibi**, leader of a green team member gave away the feedback. It was green team's time to host for that section. So Miss. Gibi hosted for that section. First she greeted everybody who gathered in the hall and welcomed Mr. Mullanchery .M. Velaian, the organizer of KAP to address for introductory speech. Through his speech he notified that it was Miss. Gibi's birthday. (As it was Miss. Gibi's birthday, we all celebrated it with the beloved personality, **Dr. Durai Singh**, Child Specialist, Medical College, Asaripallam). After that she welcomed Mr. Durai Singh to give his speech.

We were so blessed to see such a great personality there. He said that he knows KAP very well. And also he said that he was about to train KAP students on the topic called "**Medical science**". Then he said that, this world has been totally changed. Because as it is in those days, they will simply used to mug up to study they don't know the meaning of a single word. But now it has been fully became that, Mark! Mark! Mark! So he said that now a day's people think that mark is deciding the students' future. He said that, "**We can learn or we can't learn to relearn**". He also said "Karka kasadara" couplet from the Thirukural.

We all echoed the same along with him, so he appreciated that we all have learnt the Thirukural very well. Then he notified that in last year the topic given was "**Nurture nature**". So he said that it was very interesting topic. Then he explained that, the activity is based on learning method. Hence we should gain knowledge in a proper way. He said there are more than 200 doctors and nurses working in Asaripallam medical hospital. Then he said that we will be looking into the college. He asked, "How many are willing to become a doctor" and also he asked a girl from green team member, "why she wants to be a doctor?" She replied, "To serve the poor people". He appreciated her for her willingness to become as a doctor. Next, he greeted everybody there and ended his speech. Then

Miss. Gibi thanked him and Mr. Jayalal, Associate Professor of Surgery, Government Medical College to give away his speech.

Mr. Jayalal said that the gathered KAP students were lucky to have KAP meet in such a big medical college. He said, there are many teams in the college that work together to achieve their goal. What are the deadly diseases? he asked. Every student started shouting various diseases like heart disease, Ebola and so on. He said there are two types of diseases they are communicable and non-communicable diseases. The communicable diseases are contagious and non-communicable diseases are not contagious. Mostly people die due to non-communicable diseases such as alcohol consumption, smoking habits, junk food consumption and lack of exercise. If a person smokes, only 15% percent affects him and the rest 85% percent affects the nearby persons. Next to smoking, the worst habit is watching serials. Because we cannot even know whether there occurs any thief attack if we are busy watching serials. He said a story about the problems that occur by watching serials. A lady was watching serial while feeding her child. The lady was so curious about watching that serial. With the absence of her sense the milk from the feeding bottle flowed into the nose of child. He said these types of unfortunate happenings can be avoided if we concentrate on our life more than the entertainments. He then concluded his speech by advising not to eat junk foods.

Then Miss. Gibi thanked him and appreciated his sharing about the secret behind success. Then we moved to **Anatomy Museum**. There we saw human skeleton and the separately preserved parts of human body such as skull, bones such as thigh bone, head, nerve, ear, intestine, kidney, liver, reproductive system, heart, lungs and brain. We also saw a small baby, babies with one head, twin babies that were being protected in a glass jar.

Next we moved on to the **Distinction Hall**. There Dr. Rajesh, a faculty of Government Medical College explained the following things. He said that for preserving the body they will use a preserving technique called, "**Embalming**" and a preserving liquid called, "**Formaldehyde**". Then they said that a body contains 5.5 liters of blood. Next he also told us about "**Femoral Artery**". He said that when a person is dead, all blood of that person's body will be sucked by the arteries in the body. At that moment **Miss. Lekshmi**, a former young scientist said about the doctor who published the last year's book named, "**Nurture Nature**". Then we moved on to the "**Forensic Lab**". There we saw the different types of ropes and weapons that were used for autopsy dissections of human body. Then we also saw about different types of fishes, animals and snakes that were embalmed in that dissection hall.

And also we gathered a lot of information about some of the poisonous animals and others through the chart listed on the wall. Then they said that, the various departments that function in the hospital provide legal medical treatment. It also helps the police department if there are any judicial cases related to the dead body. By examining the injured bones in the dead body, the doctors can find the cause of death. And they can

also find whether the death is natural or unnatural. Natural death refers to heart attack, fits, suicide, accidents and so on. Suppose if it is an unnatural death, according to the injuries they will be deciding the type of the weapons needed to be used to find the cause of death. He noted that woman at the age of 45 lose minerals. Then he said that, all of a sudden a person won't die. First the brain will be dead after that only slowly all other parts of the body will get locked up. Then he cleared all our doubts "**Eye Donation**". And he then concluded his speech.

Further we moved into the hospital. There we went on to see the **Dermatology** section and **Venereology** section. Dermatology is the branch of medicine that deals with the hair, nails, and skin diseases. Venereology is the study and treatment of sexually transmitted diseases. There we saw some machines used to cure diseases. We were excited to see the typical machine that uses ultraviolet rays to diagnose cancer. By treating a cancer patient using ultraviolet rays we can avoid spreading of cancer cells. And also the treatment of cancer is classified in to two types namely,

- UVA
- UVB

Then he explained various details about those UVA and UVB machines. Then we moved on to the "**Major Operation Theatre**". There they showed the dress used by doctors during operation, wash basin, types of weapons that were used while the operation is being in process. Then all the devices and instruments such as Endoscopy, Small and big shadow less lamps and the rest. The shadow less lamps won't exhibit the shadow of the person.

Then we moved on to the department of '**Anesthesiology**'. There they explained about anesthesiology showing the power point presentation. Then they explained that, if a person is alive but he is unconscious first we should shake the body and ask loudly are you alright. Secondly, we should keep our ears near the patient's nose but our eyes should see the body of that patient. Next we should check the pulse in the neck. If there is no reaction, we should do **Cardio Compression** for two times and **Sternum Compression** for thirty times repeatedly until the patient awake. It means that in the sternum we should keep our hand straight and we should apply pressure on that patient. And Anesthesiology presentation was explained to us by **Dr. Rajesh**.

Then we again moved on to the examination hall for lunch. After that we had a group discussion regarding the **Leaflet** that we were asked to publish. Then around 4:00 p.m. they ended the KAP meet by honoring our nation by singing "**National Anthem**".

Through this fourth KAP meet we were able to know about various types of diseases that affect mankind and the natural, unnatural deaths that humans face. We also came to know about the inspiring contribution of medicine field towards the society. We were excited to see the medical machines that are used for diagnosis and treatment of various diseases. We honor the opportunity that we got to see the embalmed human parts, small beings and several other dangerous animals. I express my gratitude towards

all the dignitaries and elders who spend their precious time for us and taught about various topics.

13. J. M. MERESHIYA YELLOW TEAM

The fourth meeting of Kumari Arivial Peravai (KAP) was held on 29.11.14 at Asaripallam Medical Collage. The program started sharply at 8:30 a.m. First **Mr. Mullancherry .M. Velaian**, the organizer of KAP, gave some suggestions about our report and told about our next meeting. He said that our next camp will be on 6th and 7th December. He told us that each team should take any one of the topic from above and each team should prepare a leaflet notice of 500 copies. At 9:00 a.m. **Mr. Gopalan**, Headmaster [rtd], gave some tips to improve our report.

Next, **Mr. Rajendran** (9:05 a.m) gave a talk about coastal areas. He said that in 1940 during Marthanda Varman's period he built Vattakkottai fort. He also said that in the sea shore there will be many rocks which will be covered with moss. He explained why Tsunami occurred in December 24. He also said that it is due to a burst under the "Sunaina Sea" that caused Tsunami even in kanyakumari. He told about mangrove forest and Amazon forest. He also said Parthiniyam is a poisonous plant. He said that we must make a vegetable garden to get natural vegetables.

Followed by him, **Dr. Arun Prakash**, psychologist, gave a talk about medicines and psychiatric disorders. He said that psychiatric disorder means mental disorder. He said that over-punctuality leads to tension. He also said that there are two types of personality.

- Type A personality will be very punctual and very strict.
- Type B personality is very rigid.

He said that type B is best for sustainable because heart attack is very common for type A personality. He asked, Is there any good stress? and said that there are two types of stress.

❖ **EUstress**

❖ **DIstress**

He said that

A. **EUstress** is the positive stress

Whereas,

B. **DIstress** may cause many problems

He also told some of the ego defects, such as

- ✚ Mature defects
- ✚ Immature defects

He also said that we should do adequate exercise to relax our mind and we should go for morning walk for at least 1 hour to reduce our weight.

The second session was started at 11:00 a.m. First Mr. Velaiyan welcomed all the dignitaries on the Dias. Then **Dr. Durai Guna Singh**, Child Specialist welcomed everyone gathered there. He said that 200 doctors and 400 staffs are working in Asaripallam Medical Collage. He asked how many of them wish to become a doctor. More than 20% of them raised their hands. He asked one of the green team members, why do you want to become a doctor? She answered to serve the poor people without buying money. He encouraged her and concluded his speech.

Followed by him, **Dr. Jayalal**, Associate Professor of Surgery of Government Medical College gave a speech. He said that more than 200 people are visiting the college and 200 doctors are working there. He also gave a definition for "Team". He said that team means,

- ✓ **T** - together
- ✓ **E** - every
- ✓ **O** - one
- ✓ **A** - achieve
- ✓ **M** - more

'**Team**' means **T**ogether **E**very **O**ne **A**chieve **M**ore. He also said that 65% of the people are dying because of non-communicable disease where as 35% people are dying because of communicable diseases. He also said some of the causes of diseases are:

- Alcohol
- Smoking
- Junk food
- Lack of exercise

If we follow these characteristics we will be affected by non-communicable diseases. He also explained that smoking affects less the people who smoke and more the people who do not smoke. That is, only 2% of the smoke will affect the person who smokes where as the rest 98% of smoke will affect the people who do not smoke. He also told that

- One Parotta has 800 calories
- One Apple has 60 calories
- One Idli has 100 calories
- One Egg has 100 calories

Next we went to **Anatomy Museum**. There we were very much excited to see skeletal system, skull, ear, brain, intestine, stomach, kidney, liver, heart, chest box, lungs, babies, twin babies, eyes and parts of head of human body.

Next we went to **Dissection Hall** there **Dr. Denin** and **Dr. Vinu Victor**, faculties of Government Medical College gave some information about '**Postmortems**' and told us that if a person is died we will wait for 9 days to see whether any person is coming to buy a body. If no one comes up to 9 days, at 10th day the hospital will own the body and they will use a technique called '**Embalming**'. Embalming is a method to preserve human parts. For the process of embalming we need sodium chloride, glistening, 5.5/water and so on.

Next we went to **Forensic Medicine Lab**, there we had glance of seeing the star fish, weapons, fractures in the neck joint that hung. Also we saw many dead snakes like Wolf Snake, King Cobra, and Chameleon .There **Dr.Rajesh** said that it is a forensic medicine lab. He told many of the causes for death. He also said that now a days, we have facilities to find a person's death whether it is a natural one or unnatural one.

Next we learned about a machine called "Psoralen UVA hemphotography", there the faculties, **Mr.Kannan** and **Dr.Prajetha** gave a brief explanation about the machine. She said that there are two types of modes like,

- UVA
- UVB

She also said that, UVA means high volt and UVB means low volt. Next we went to **Operation Theater**, there **Dr.Rajkumar** showed us some of the things used by doctors in operation theatre such as Theater Dress, Anastasia, Cautery, Endoscopy, Suction Aperture, etc.

Next we went into a conference hall. There we were guided by the faculties of the department of Anesthesiology, **Mr.Dibin**, **Mrs.Thana Lakshmi** and **Dr.Edward Johnson**. They said about basic supporting guidelines for life. He also said that without Cardiopulmonary resuscitation (CPR), irreversible brain damage occurs within 3 - 4 minutes. He told that time is the crucial factor here to decide the survival. He also told that it should be done immediately by a by stands. Then he also explained about minutes count. He said that when the heart stops, damage occurs to the brain. So for 5 minutes BLS will be activated. He also said that CPR has two steps airway and breathing. He also said that if a person faints, we have to follow these steps, such as,

- ✚ Gently shake his shoulder and chin lift
- ✚ Using BLS algorithm check responsiveness
- ✚ Keep the person in open airway
- ✚ Help him to breathe
- ✚ Make him access air circulation.

He also told about two types of airway:

- ☀ Circulation
- ☀ Non-circularation

..... We had our lunch break.....

Next we had our team discussion, there **Mr. Edwin Sam**, remained about our next meeting. We had a discussion about our topic "**Kadalora Thuimai**". Next **Mr. Mullanchery .M. Velayan** said that we should send the 'Thanks Letter' to Asaripallam medical college.

Next **Mr. Benzigarajan**, Deputy Manager, ISRO Propulsion Complex, Mahendragiri, said about "**Kadalora Thuimai**". He said that the distance between Neerodi to Vattakkottai is 68Km and Kanyakumari is 68Km. He said that there are 26% of fishermen in kanyakumari district. He also said that **Estuary** is the place where sea and river meet.

He also said in some of the well-known rivers like Valliyaaru, Pantriyaru, Paampaaru, we would get over twenty species of fishes. He also said that we could find more number of "Sea turtles" in the area from Rajakamangalam to Pariyakkaadu. He also said that that hup poruitkal is in manavalakkuruchi. He also said that everywhere throughout the coastal areas we could see Coconut Groove. And then we could see biggest rocks near the seashores of Kanyakumari and Muttam . He also said that AVM canal starts from Mandaikkadu to Kollam and then he concluded his speech. At last the KAP meet ended by singing "Jana Gana Mana", the National Anthem.

By this KAP program, I was able to know many details about medical field. It was interesting to know about different forms of medicines used to treat many critic diseases. I came to know about postmortem and the methods to do it. And moreover I was excited to hear about Embalming which is a way of protecting the parts of human body. I know about the coastal areas and the riches that our seas inherit. I thank all the great personalities, faculties and elders who shared their knowledge to us that will be useful for my future.

14.J.S.EDIN JIJO,
YELLOW TEAM.

The training programmer started at 8.30am. The venue was the examination hall of Government Medical college Nagercoil. It started with the welcome address by Mullanchery Velian sir, the organizer of KAP. Sir pointed some errors in our report. Sir was not completely satisfied with the report presentation. When we send our report we should write our name and the team we belong to as the file name. Then he informed about two camps; one camp is the seashore awareness camp where we will get the chance to visit all the seashore of Kanyakumari district. This is to create awareness among the fishermen regarding the cleanliness of the seashore. And we should make some tracts on seashore cleanliness. This camp will be conducted on 27, 28th of this month. And sir informed about another camp which will be held on 6th and 7th of December. Through this camp we will render our support to our prime minister to achieve perfection in his dream. We were advised to bring jute sac or cloth sac to collect waste around the Nambi Koil. Then we will be taken to an organic farming place.

Mr. Gopalan, coordinator of Yellow Team, explained the format for report writing and he emphasized the formal method which the students can follow.

Mr. Mangavilai Rajendran, an officer of AIR, explained about sustainable environment. The main aim of sustainable environment is taking the present nature to the future generation without any harm. Still few years back the border of kanyakumari seashore started from Lapanon to Neerodi. But now it has extended to Arogyapuram, Vattakottai, Lapanon, Chinna muttam, Koallam, etc. Vattakottai was constructed by Marthanda Varman Maharaja for his protection from the Dutch army of Delanoy. Vattakottai is rich in mineral soil and different varieties of fishes. Few years back quarter

part of Vattakottai was covered with sea water, but now it is fully visible. Lepadon is famous for light house of old type (oil light) and tortoise. Tortoise are normally live in calm places where no human disturbances. In china muttam and kollam Salt plants are abundantly seen. In order to protect the seashore from the heavy waves the government made boundaries with huge stones, but this attempt of government didn't give any support. With this we cannot stop tidal waves. Tsunami is a Japanese word means "harbor waves". Due to tsunami the Kumari Khandam, the place where life originated destroyed and sunk inside the sea. We cannot forget 26th December 2004, the made us to mourn. Tsunami made huge destruction in the worlds history. Tsunami originated from the Siberian coast in Indonesia due to underwater earth quake spread to southern part of Indian coast. It's speed is noted as 800km/hr. During tsunami huge waves are evolved and made destruction to the seashore, but it was noted there was no harm happened for the people who were inside the sea in boats. Our former minister Mr. Pachaimal was safely protected in a boat. When he reached the shore only he understood the problems around seashore. After the tsunami they understood no problem to the people who are in the boat in a sea. Aaerankal beach it got the name because there was nearly thousand canals linking to the sea but now only one is present. We all are destroying the natural walls which god gave and which blocked the waves of tsunami that is sand dunes. We are taking the sand from the sand dunes for our commercial purpose. nowadays we are planting coconut trees in everywhere but in olden days there where khalai tree which also protected from the tsunami due to it's hardness. Even an elephant could not break it. We had our snacks tea, biscuit and sammosa. Manavala Kuruchi is famous for its rope cultivation and exporting it to other countries before few years they exported only to British from the Colachal beach. In 1883 there was a tsunami in India. The symptoms of the tsunami was clearly understood by the British and thy warned the Indians. But the Indians did not believe because they had experienced it. India has more fishes in the sea compared to other countries. This is because the salt content is less in the Bay of Bengal. The salt content is less because the rivers and canals join in the Bay of Bengal. And the sea is also not so deep so we can find more coral reefs in the see which acts the house for the fishes. So, the fishes also puts their eggs in the coral reefs and hatch their babies. Finally it ends in the Thenkaipattanam. It has more canals which end in the sea so the sea will have less salt water so there will different varieties o fishes in a huge quantity. Since there is re canals the fishes lay their eggs in the canals. We are wasting the fresh water so only god made the remaining 97% as seawater. Kannyakumari is blessed with all resources like forest, mountain and sea. We should develop coniferous type of forest. Transpiration accurse due to this trees and rain cloud forms which leads to rainfall. The British made the ground water less in the Ooty by planting more eucalyptus tree. We are planting more foreign plants for commercial purpose which are very harmful to our soil. And we are also destroying the medicinal forest for planting this type of foreign plants. Nowadays we are not taking care of any ponds. Before some years

ponds where clean and transparent but not it is contaminated with waste and it is seen opaque. There were more medicinal plants in India but we are transporting it to other countries and buying the poisonous plants. We are killing the bacteria and earth worm (farmers friend) which are present in the paddy field and spraying the harmful pesticides on it which is very harmful to us. If we are in taking more salt it may lead to kidney problems and may lead to death. In olden days we had 72 varieties of rice but now we have only 35 varieties of rice. In olden days the people who eat white rice will only get sugar, health problems and cholesterol but the red color rice completely eradicates this. We Tamil people are preferring white rice but Kerala they are preferring red rice even in marriage house. Kerala bans the people who cut the stones from rocks but in Tamil Nadu it is straight opposite. In Kerala lakes or rivers I we dig under a lake in one feet we will get the pure water and alluvial soil but in Tamil Nadu if dig 10 feet also we will not get it and the alluvial soil is stolen for commercial purpose. Now we are growing cactus for styles in our home the Kerala people grow vegetables and fruits were ever they get place. Kerala are growing earthworms separately to put in the paddy field to increase the yield's rate but we are building bungalows and houses over the paddy field. So, Kerala is better than Tamil Nadu in sustainable environment. In Tamil Nadu the water decreases, land is destroying, environmental changes and no sustainable environment.

Through sir's speech I got a lot o information about the olden days Tamil Nadu and the modern Tamil Nadu. And why we are lacking in everything, so I thank sir from my bottom o my heart for giving this valuable information.

Dr. Arul Prakash, a Psychiatrist told us that we would be taken around the college. After this words all young became full of joy. Physiology is the branch of which deals with the mind diseases which affect the mind. The mind problems cause diseases in our body. I a person is over punctual or over smart he has tension. There are two type of personalities one is type A and another is type B. type A personality can de an general or army. One who is very punctual is known as type A. A person who does not mind about anything is known as type B. type A leads you to heart attack. There are two types of stress one is use stress and the another is distress. Use stress is known as positive stress and distress is known as negative stress. Positive stress makes you to bother about others and negative stress does not bother about others. Type two may cause problems like bronchioles damage, cerebral spinal damage etc. There are three components of life one is IT, EGO and Super EGO. IT not reality based, EGO reality based and Super EGO like our grandfather. Go is classified into immaturred and matured. Immaturred is the childhood and matured is channelized and the adulthood. A positive mind requires positive thinking, confidence, thinking failure as success etc. we take food regularly, sleep minimum 7hours, go joking do skipping etc which makes our life healthy. Instead of developing friendship in face book we can develop in our street which increase our self confidence. Then gibi gave feed back. Then again vellian sir welcomed the dignitaries to the dice. The dignitaries are Dr.Durai Kuna Singh, dean of the college; Dr.

Arul Prakash; Dr. Jayalal, general secretary of IMA. Then we celebrated the birth day of the green team leader Gibi by cutting cakes.

Dr. Durai Guna Singh. Sir informed when they were studying in their school they had not went out of their school. They used to mug up and write for the exam. In what field you mug up also but in medical you should learn and apply it. Now the government is developing activity based learning which is more effective for the students to learn. Medical is a noble profession.

Dr. Jayalal. This campus has a eco club to save the nature this is the college which has more medicinal plants. In this hospital nearly 2,000 people come to this college and nearly 30 surgery takes place in a day. In this hospital they work together in a team. The word team stands for Together Everyone Achieve More. There are two types of disease communicable and non communicable. Nearly 35% of them die due to communicable and 65% die due non communicable disease. Communicable disease can be cured by the doctors but the non communicable disease can be cured only if the community think. Breathing, Cancer, Diabetics and Cardio problem. Alcohol, Smoking, Junk food and no exercise. The people who kills others is known as a terrorist. So, a smoker is a terrorist because the smoker in hales only 15% of smoke that he smokes but the people near it in hales 85% of the smoke. So the near by person is only affected the most. Nearly 2crores is the profit of government in selling alcohol drinks. So if the government close then it is a loss for the government. The killer of people next to smoke is serial. And serial is a plus point to the thief. We must eat more fruits and vegetables for a good health. Health refers to a person who is mentally, physically, socially and spiritually well being.

Through the speech of these three doctors I got a lot of information about medical and it lead me curios again and again my ambition that is doctor.

Dr. Arul Prakash took around the college first we went to anatomy lab were we saw Prof.Vino Victor and sir explained regarding the human parts which was displayed their and we saw some skeleton, bones and human parts. We were afraid after entering the lab by seeing the human body parts assembled their and we also saw the stages of small babies in side hi mothers womb. Then we went to dissection hall were we learned how to preserve the dead body from decaying. To protect the dead body the doctors use the formalin, sodium chloride and glycerin. They sent this solution through the arteries because the artery become empty before the veins. And they will put the body in side a tank with the same solution including the water in it. And Lekshmi, the former young scientist, said thanks to the sir for spending his valuable time with us in his busy schedule. Then w went to the room where the doctors find how the accident acquires. There we saw some poisonous fish, snakes and scorpions. Hippocrates is the father of modern medicine. This hall is to help the judiciary and the police regarding how the dad acquired and weather it is natural death or artificial death. And we asked our doubts to the regarding medical jevini, former young scientist told thanks to the Dr. Rajesh the

HOD of that block for spending his busy schedule with us. Then we were taken to the hospital and we went to the skin care unit there we saw Dr. Prajetha who thought us regarding the machine which helps to demolish the harmful cell this process is known as scemo photo therapy and the machine used is the PSORALA and lekshmi thanked mam for their wonderful speech regarding the machine. Then we went to the minor operation theater which will be always near to the OP room. The first and most thing that we should follow in the theater is cleanliness. There we the theater dress known as air prant. Then we saw the things required for endoscopy. Jesvini told thanks to the Dr.Raj Kumar for telling few things regarding the operation theater. Then we were taken to a conference hall there Dr. Edward and Dibin taught us regarding the Anaesthology. The three vital science is the conscious, breathing and pulse. Then we learned about the two branches of cardio pulmonary first one is the basic life support and the advanced basic life support. The heart can leave without oxygen is 5 minutes and the vital time is 3 minutes. The three components of BLS is airway, breathing and circulation. If a person is unresponsiveness shake the shoulder and check the air way for that head lift, chin lift and jaw lift. the checking for breathing is look, listen and eel the breathe. I not do two times rescue breathing. To check circulation check the pulse in the neck. Then compress the breathe between the spinal cord and the rib bone. Then sir showed two videos one is what no to do when a person a faints and what not to do when a person faints. Then abina thanked sir demonstrating what to do person faints. Then we assembled in the examination for the lunch. After lunch we had a team meet for 30 minutes we were discussing regarding the water and seashore cleanliness. Then velian sir informed there will be a team meet at malavika's house to learn how to use computer. Then we assembled again for the meeting at 3.30 pm.

Mr. Benzikar Rajan, sir told regarding the seashore. Tamil Nadu's seashore boundry is 1074 km and kannyakumari's is 68km but nearly 27% of the fisher man live in kannyakumari. This is because there is more fish in kannyakumari. There is more fish because of the five rivers. The rivers are Thamarai parani, Palaiya aaru, Valli aaru, Pamparu and the Panthi aaru. This makes the sea less salt. The kannyakumari's beach start from the vattakotta to nerodi. We make the AVM canal like how it was in the first. The waves increase and decrease due to the direction of the wind , speed of the wind and color of the wind and these are three method used to catch fish

I than sir for his valuable speech regarding the seashore. Even though sir was very he attended it is a great thing about him.

Today's meeting was very informative and I got a lot of information regarding medical and it made a clear basement for my ambition. So I thank Velian sir who found this organization for us I thank you from my bottom of my heart.

