

Field work/Educational Tours

Number of courses that include experiential learning through project work/field work/internship during the year

- Programme / Curriculum/ Syllabus of the courses- **Discipline Specific Electives (DSE) A4 [Community and Public Health]**

Title: A cross sectional study of physical, respiratory and cardiovascular parameters in relation to quality of life of Welders.

Purpose

It is to assess the cardiovascular and respiratory status of workers exposed to welding fumes and to evaluate the factors influencing cardio-respiratory status like age, smoking habit, obesity.

Venue/Location-

Dhaniakhali, Hooghly, West Bengal and Rishra, Hooghly

Date time- 7.3.2022 (from 1pm to 4pm) and 12.3.22(from 10 am to 4pm)

Brief Summary of the work done

The study documented work related changes in Pulmonary function, cardio-vascular functions and related physical parameters of welders with prevalence of respiratory abnormalities and cardio-vascular diseases in comparison to control group. Smoking habit, exposure to dust in the work place potentiate the effects of fume inhalation. Long term exposure to welding fumes increases the risk of respiratory and cardiovascular disorder with higher percentage prevalence of several symptoms of diseases.

On the basis of our findings, we recommend primary prevention for diminishing the adverse effects of welders by proper ventilation in work place, use of protective gadgets ,smoking cessation as well as periodic health checkup must be performed .

Limitations in this study-

1.the number of subjects was small

2.we performed cross sectional study. 3.we did not take any environmental data from the industry.

Therefore, longitudinal study with large no. of subjects is needed to confirm any causal association.

• **Details of experiential learning through project work**

The welding workers of different industries are mainly exposed to toxic gaseous fumes and toxic metals which mainly affects their respiratory system. Heat stress within work place probably affects cardiovascular system. Exposure to toxic metals produce skin irritation and digestive disorders .So to protect the health of workers in welding industry environmental factors must be regulated by reducing heat stress in work place, use of toxic metals must be

restricted by using new sophisticated technologies and strict instruction of use of protective gadgets – goggles, mouth guard, fully covered shirt, gloves etc .Protection of health of workers will bring benefits to management by increasing productivity and economic growth will be continued.

Photographs

Students and teachers of Raja Peary Mohan College with management of Industry- Auro Impex and chemicals

Measurement of body height



Students and teachers of Raja Peary Mohan College in Welding Industry- Fero Mecha



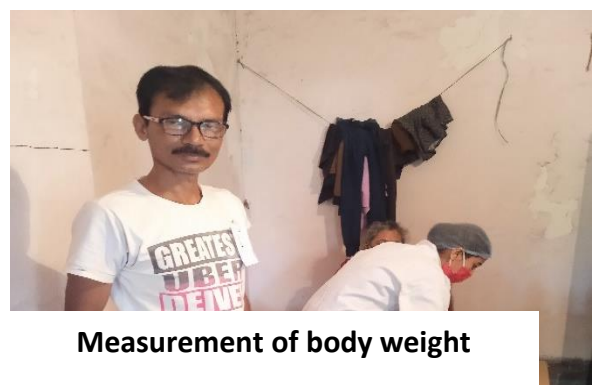
Measurement of blood pressure



Working team of Department of Physiology, Raja Peary Mohan College



Measurement of Respiratory flow rates



Measurement of body weight

LIST OF PARTICIPATION OF STUDENTS IN STUDY TOUR, 2022

Date- 07.03.2022

Place- Rishra

S.NO	NAME OF THE PARTICIPANTS	Signature of the Participants
1	Archita Ghosh	Archita Ghosh
2	Smitha Biswas	Smitha Biswas
3	Aditya Pal	Aditya Pal.
4	Amartya Roy	Amartya Roy
5	Bhaskar Pal	Bhaskar Pal.
6	Suhel Adak	Suhel Adak

Date- 12.03.2022

Place-Dhaniakhali

S.NO	NAME OF THE PARTICIPANTS	Signature of the Participants
1	Archita Ghosh	Archita Ghosh
2	Smitha Biswas	Smitha Biswas
3	Aditya Pal	Aditya Pal.
4	Amartya Roy	Amartya Roy
5	Bhaskar Pal	Bhaskar Pal.
6	Suhel Adak	Suhel Adak

