AIMS AND OBJECTIVE
Cancer of the female reproductive tract has a high incidence amongst Indian women. Human papilloma virus (HPV) is the most prevalent risk factor for cervix cancer. Inspite of several environmental and dietary risk factors for cervical cancer has been investigated in case control and cohort studies. Cervical cancer accounts for 20% of all new cases diagnosed in the world annually. The incidence is higher in rural areas, where prevention and screening programs are not easily available as in urban areas.

**The objective of the present work:**

The experimental designs and ideas of this study are solely concentrated on the blood collected from different categories of patients being treated in the Government Hospitals for cervical cancer patients with their proper consent. This study attempts to identify, investigate and assess the dimension of the possible biochemical mechanism involved in the context:

- Carbohydrate metabolism,
  - a) Glycolytic pathway
  - b) HMP Shunt pathway
  - c) Study of LDH isozymes
- Antioxidant defense mechanism
- Carbonyl content of plasma
- Erythrocyte membrane organization
  - a) Osmotic fragility of erythrocytes
  - b) Lipid peroxidation
  - c) Membrane fluidity
  - d) SDS-PAGE of the membrane protein

This work explores to find out some specific parameters, which can be used as diagnostic tools for earlier detection of malignancy. Understanding how biochemical factors interact with the metabolic abnormalities is of immense importance in this context.

Inspite of large number of reports available on the metabolic alteration in the RBC of cervical cancer patient, there appear no correlation between the stages of cancer and metabolic activity of the RBC and tissues. The results which are obtained during the course of this study may throw some light on this aspect of the disease.
Understanding how biochemical factors interact with the metabolic abnormalities is of immense importance in this context. Despite the presently available treatment methods, the complication of the disease continues to progress. Potential risk factors of susceptibility are to be identified for diagnosing the pathological process that contributes to the progression of cervical cancer. This research will definitely support and raise questions about the therapeutic approach and significance which will provide a guideline for the diagnosis and prognosis of the complications in subjects suffering from cervical cancer.