The findings of the present investigation clearly point out the increased risk in the health of beedi rollers. A survey undertaken initially to understand the socio-economic status and environmental background of their dwelling revealed, that women are mostly indulged in this home based industry and the revenue they get is very poor. As a result, they have to work for prolonged hours, inhaling the raw tobacco dust and handling with bare hands sitting in unusual postures. They mostly complain of musculoskeletal pains and also respiratory and skin ailments. Their socio-economic background on the whole is very poor with insufficient salary, inadequate education and poor dwelling environment. Blood sample analysis of women volunteers carried out in the second part of investigation showed decreased range of total erythrocyte count and haemoglobin and increased range of total leucocyte count than the control population. Platelet count exhibited a decrease but existed within the normal range. Erythrocyte sedimentation rate was high in beedi rollers than in control population, whereas, packed cell volume was low in beedi roller population than the control. Elevated levels of sodium, potassium and chloride was observed in beedi rollers than the control population. Significantly decreased level of sugar and elevated range of urea and creatinine was observed in beedi rollers than the control population. Decreased range of T<sub>3</sub> and T<sub>4</sub> and elevated range of TSH was noticed in beedi rollers than the other two populations. Liver function test showed increased range of total protein, globulin, GGT and decreased range of SGOT, SGPT and normal level of ALP in beedi roller population. Lipid profile test exhibited elevated range of total cholesterol, triglyceride, very low density lipoprotein, Apolipoprotein-A, C-reactive protein and lipoprotein A and decreased range of high density lipoprotein were observed in beedi roller population.
The next phase of study deals with the comparison of blood profile of smoker, beedi roller with control population. Increased range of TEC was found in smoker population. Decrease in TEC was observed in smokers and beedi rollers but it was close to the lower limit of the reference value. Platelet count, haemoglobin content and packed cell volume were very low in beedi roller than the smoker and control population. The erythrocyte sedimentation rate was very low in smokers. Beedi rollers exhibited low level of sodium and potassium, whereas, smokers exhibited increase range of chloride. Both beedi rollers and smokers exhibited urea and albumin within a normal range. Whereas, sugar and creatine, total protein and globulin was high in beedi rollers. Both beedi rollers and smokers showed normal range of $T_3$ and $T_4$ and decreased range of TSH. Liver function test exhibited increased range of total protein, SGOT in smokers and ALP in beedi rollers. Both beedi rollers and smokers exhibited normal level of SGPT. Elevated level of total cholesterol, low density lipo protein, very low density lipoprotein, apolipoprotein B and C-reactive protein were observed in smoker population followed by beedi rollers. Both beedi rollers and smokers exhibited a decreasing trend of HDL and LPA.

Thus the present investigation could highlight the occupational hazards of women beedi rollers. Eventhough they report physical ailment such as headache, backpain, neckpain, wristpain and other musculo skeletol disorders, they have serious physiological disturbances which are evident through the haematological enumeration of their blood samples. When compared with the blood samples of smokers, beedi rollers also showed similar trend in all blood parameters studies and expose the risk of beedi rolling. Thus it is appropriate to conclude that beedi rolling is as hazardous and dangerous as that of smoking.