ANALYSIS OF SOCIAL AND ECONOMIC PROBLEMS RELATED WITH CERVICAL CANCER

W.B.Vasantha  
Dept. of Maths  
Indian Institute of Technology  
Chennai - 600036

K.Nirmala  
Dept. of Maths  
K.N. Govt. Arts college  
Thanjavur - 613007

R.Nallaswamy  
Dept. of Maths  
National Institute of Technology  
Tiruchirapalli

In this paper we analyse the socio economic problems related with the cervical cancer patients using Bi-directional Associative Memories Model (BAM model). We have interviewed over 260 cervical cancer patients using a linguistic questionnaire from the Tanjore Medical College Hospital. This linguistic questionnaire was transformed into BAM model.

From the BAM model we see the major reason for the cervical cancer is due to lack of genital hygiene in both partners, social and economical conditions, several sex partners, early marriage and poverty. We, using the same attributes from F_X and F_Y form the Fuzzy Relational Maps (FRM) and compare them with BAM and derive the following conclusions and results.

Our sample study is mainly based on economically and socially backward women. Further most of them were coolies married at a very young age and we could conjecture that due to their profession and social set-up they must have had prolonged period of sexual activity. Unless women are economically and socially empowered the increase in the number of cervical cancer patients cannot be reduced. Further only economic
empowerment can make themselves self-sufficient and insist on genital hygiene of their partner.

It is further suggested that the government should take steps to offer women in the age group 30-65 free periodic screening tests for deduction of cervical cancer so that they do not become chronic patients, and enable them to take treatment at the appropriate time.