

## SHC 48 . A FUZZY LOGIC MODEL FOR THE DIAGNOSIS OF SILICOSIS

Deniz BOZ ERAVCI, Serdal Kenan KÖSE

Labour and Social Security Training Expert, Centre for Labour and Social Security Training and Research  
Department of Biostatistics, Ankara University School of Medicine

Nowadays the use of computer technology in the fields of medical diagnosis, treatment of illnesses has highly increased. The objective of this study is to detect the silicosis in the workers by using Fuzzy Logic Model. The designed system based on a public hospital database in Ankara. A total of 560 patients' data used in this study. The system consists of five (5) input fields, 243 rules and one output field. Input fields are the amount of smoking, radio graphic profusions core, erythrocyte sedimentation rate, general symptoms and working times. Silicosis risk is determined by the way of fuzzy modelling of input parameters. In this study it has been determined a majority of patients (%81,1) have moderate silicosis risk while %13,8 of patients have a high silicosis risk.

\* [denizbozdb@gmail.com](mailto:denizbozdb@gmail.com)