

# Analysis of Demographic and Health Survey Data of Turkey with Bayesian Networks and Association Analysis

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## SUMMARY

Data mining is a process of discovering new relationships, patterns and trends from large databases. In this process many statistical methods can be used. Two of these methods are Bayesian Networks and association analysis. Bayesian Networks are used to encode probabilistic relationships among random variables and they combine data information and experts knowledge about data [1]. In the literature, many learning algorithms have been proposed to build Bayesian Networks. They can also be built according to association analysis results [2]. Association analysis is used to extract surprising and useful patterns from large databases. However, association analysis algorithms generate many patterns even if the data set is very small. Therefore, these patterns should be eliminated with respect to their interestingness by using objective and subjective interestingness measures. Subjective measures can be established by means of Bayesian Networks. In this study, these two methods are used together to analyze Demographic and Health Survey (DHS) 2008 data of Turkey.

**Keywords:** bayesian networks, association analysis, knowledge discovery, DHS

**AMS Classification:** 94C15, 90B15, 68P15

## References

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