

CLINICAL DECISION SUPPORT SYSTEM
FOR THE HEALTHY MARRIAGE PROGRAM

Ahmed Alsharit

Dr. Patricia Alafaireet, Thesis Supervisor

ABSTRACT

This paper discusses the replacement of the traditional laboratory premarital screening in Saudi Arabia and other countries that follow the Islamic laws “Healthy Marriage Program” with Clinical Decision Support Systems (CDSS). CDSS uses the couple’s electronic health records to determine if the match is harmonious. The traditional premarital screening consist of couples undergoing a screening process for Sexual Transmitted Infections (STI) and genetic blood disorders prior to becoming engaged or getting married. The traditional screening practice faces many challenges, such as being culturally unaccepted, time consuming, and unorganized. The CDSS would eliminate the challenges of the traditional process by giving marriage agencies, marriage licensors and traditional matchmakers access to insert the national identification number of new couples to see if their potential marriage would be healthy or not. Unhealthy marriages would be required to go through sex/genetic counseling sessions as an attempt to prevent the spread of the STI’s and genetic blood disorders.

Saudi Arabia is moving from paper health records to electronic health records (EHR). CDSS would be used as a tool to help health care providers deliver higher quality service by using patients’ records stored in EHR. CDSS could potentially minimize clinical visitation and provide treatments to couples before getting engaged.