

H.M. HUA, Y.H. LIN, K.H. HUNG, S.L. HSU, T. LEE. **Family trace on elderly depression and chronic diseases.** *Gerontechnology* 2012;11(2):171; doi:10.4017/igt.2012.11.02.467.00 **Purpose** The aging population with neurotic and personality disorders in Taiwan approached 1.2 million people in 2011¹. Genetics, reflected by the family history, is an important factor in predicting recurrence of depression, anxiety, and insomnia²⁻⁸. The analysis of occurrences in the family is called the family trace. The family trace is also important for elderly patients with chronic diseases. Depression and chronic diseases are often correlated in clinical diagnosis⁹. We developed a clinical database management system with a family trace function to improve clinical service in elderly depression treatment. **Method** In this study, sample data was collected from a local clinic in Taipei, Taiwan, from 2006 to 2011. With these data we built relational database to manage and analyse clinical elderly depression data (Figure 1). Age groups and family trace were classified. Types of depression and chronic diseases were classified according to the internationally accepted standards, ICD-9 (International Classification of Diseases, 9th Revision). An evaluation by a clinical specialist was carried out to assess the quality of the patients' family tracing and depression treatment frequency. **Results & Discussion** A total of 6204 family identifications were assigned to 52 813 patients. We analyzed 1125 depression patients' data from three age groups: >65; 47 to 64; and <46. Family links were found for 157 patients from these three groups. These family aggregations helped clinical specialists to give improved care to these patients. In addition, the therapy and medication adherence of patients with a family trace is better than that of patients without. Family trace provides an effective tool in disease diagnostics and continuous care among community-based family medicine practitioners.

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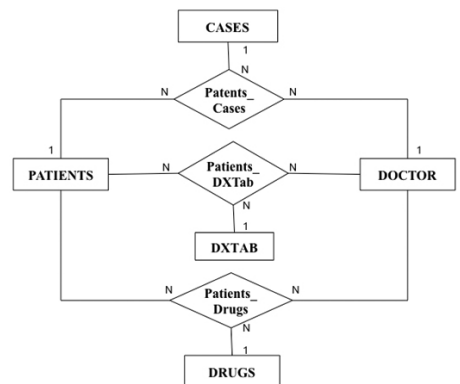


Figure 1. The meta model of E/R of the elderly depression database. The relationship set is a specialization of a general n-ary relationship set. It connects n different dimension level entities to represent a fact, such as doctors' diagnosis on patients at Patients_DXTAB, of dimensionality n