

Thesis Title Factors associated with osteoarthritis of the knee : A case study of the patients in Ramathibodi hospital

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ABSTRACT

The purpose of this study was to find factors associated with osteoarthritis of the knee and analyzed their strength of association. The data were a sample of 300 OPD patients attending at the Ramathibodi hospital. The study group consisted of 150 pateints diagnosed as osteoarthritis of the knee joints, and the 150 controls. Data collection were made during May, 9 - June, 7, 1989, of which the systematic random sampling method was used.

The data analyzed by multiple logistic regression with stepwise technique revealed 7 major factors associated with osteoarthritis of the knee joints in the following orders: age, body mass index, Intercondylar distance, Intermalleolar distance, history of osteoarthritis of the knee among family members, sex and occupation. The most important risk factor found from this study was persons with Intercondylar distance about 0.1-3.9 cm. showing adjusted relative odds (RO) 10.7. The other risks ranked order by RO were Intercondylar distance more than 3.9 cm. (RO=9.8), Intermalleolar distance (RO=9.3), a persons aged over 64 years old (RO=8.8),

body mass index more than 29.99 kg/m^2 (RO=7.6), a person aged 45-64 years old (RO=6.9), body mass index $25.00-29.99 \text{ kg/m}^2$ (RO=5.7), history of osteoarthritis of the knee among family members (RO=4.1), very active occupation (RO=3.9), moderate activity (RO=3.8) and female (RO=3.3). These risks were compared with their reference groups while controlling for confounders. The nonsignificant risk factors in multiple logistic regression analysis were marital status, income, history of diabetes, history of hypertension and history of injured knees.