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PATCHARIN SUPAPSOPHON: ASSESSMENT OF A DRUG USE
EVALUATION (DUE) PROGRAM FOR HMG CoA REDUCTASE INHIBITORS
AT RAMATHIBODI HOSPITAL. THESIS ADVISORS: CHA-ONSIN
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Drug Use Evaluation (DUE) of HMG CoA reductase inhibitors (statins) was performed at Out Patient Departments of Ramathibodi Hospital. The study was a quasi-experimental research design. Data was collected retrospectively for the pre-intervention phase (November 1999 and January 2000) and for the post-intervention phase (May 2000 and June 2000). The intervention used educational strategies, consisting of posters, brochures, and letters. The objectives of this study were to 1) establish HMG CoA reductase inhibitors use guideline, 2) study patterns of prescribing statins, and 3) assess the outcomes of DUE interventions.

A Ramathibodi HMG CoA reductase inhibitor guideline was established. The recommendations, for the justification for use of statin, were focused on 3 major areas as follows: 1) lifestyle modification should be performed as first step therapy, 2) both lipid level and other atherosclerosis risk factors should be considered in initiation of pharmacological therapy, and 3) use of statins in young patients should be postponed except LDL-C \geq 220 mg/dL.

Patterns of prescribing statins were analyzed according to 3 variables: patient variables, medication variables, and physician variables. There were more than 200 new users of statins each month, most of them were female, the average age was 57 years old, 2.6% were familial hypercholesterolemia patients. Aging was the highest risk factor found followed by hypertension and diabetes. Most statin prescriptions were essential drugs and the average cost of statins was 24-35 bahts per day. There was a variety of specialties of physicians who prescribed statins. 62-66% of the prescriptions adhered to the Ramathibodi guideline in term of appropriate LDL-C level.

The comparative study of an educational intervention on prescribing behavior between pre and post intervention periods showed no impact on adherence to the guideline. However, it did influence some changes in post-intervention such as reduction in number of prescriptions, decrease in variety of physicians, and the patterns of use which shifted to more risk patients and gained more documentation on inquiring about risk factors.

A more interactive approach and more enforcement strategies should be performed, in order to obtain a higher percentage of adherence to the guideline, and the DUE program should be performed continuously.