

**DEVELOPMENT OF COMMUNITY PHARMACY DATABASE ON-LINE  
INTERACTIVE RETRIEVAL SYSTEM FOR  
ELECTRONIC DRUG INFORMATION**



**INSTITUT PENYELIDIKAN, PEMBANGUNAN DAN PENGKOMERSILAN  
UNIVERSITI TEKNOLOGI MARA  
40450 SHAH ALAM, SELANGOR  
MALAYSIA**

**BY :**

**PROF DR ABU BAKAR ABDUL MAJEED**

**EN. MUSTAFAR KAMAL HAMZAH**

**PN. EZLINA USIR**

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## ABSTRACT

Community pharmacists counsel patients and answer questions about drugs, side effects or interactions. They provide information about over-the-counter drugs and make recommendations after talking with the patient. They also may give advice about the patient's diet, exercise, or stress management or about durable medical equipment and home health care supplies. Some community pharmacists provide specialized services to help patients manage diabetes, asthma, smoking cessation, and high blood pressure. A good user-friendly drug information system for the use of community pharmacists is lacking. This research project aims to design and build an organized database of specialized information on drug therapeutics to meet the drug information needs of the community pharmacist, expand the role of the pharmacist in providing drug information services to the community, and use computer software program designed to check prescriptions for duplicate drug therapies, potential drug-drug and drug-allergy interaction, with the view of developing it into a pharmacoinformatics or telemedicine system application in the near future. Data is initially stored in Microsoft SQL, while the interface of the database has been created using Visual Basic 6.0. Among the facilities provided by the system include accessing information on drugs by name list, brand name or registration number. Information provided are 'action', 'dose & missed dose', 'duration and adr' (adverse drug reaction), 'similar product' and 'precaution storage & notes'. There is also advice on the use in special cases: Infancy, Child, Adult, Elderly and Pregnant. A search on drugs can be done by generic name, brand name or registration number. Users can search information on diseases, which are explained by five categories: 'description', 'symptom/sign', 'trigger factor', product' and 'other info'. There is also an option to visualise in picture form drugs (pills) for quick and easy identification. The pharmacist can update, delete or insert new data on all the above facilities, using restricted access.

The system can be used by the community pharmacist as the database is specially prepared for use in such setting, where primary care is provided to the public. For future enhancement, especially in terms of flexibility, a web-based application has been proposed.

*Keywords:* community pharmacist, drug information system, disease, generic, brand, drug interaction.

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