

# MR に期待される医薬品情報活動について 決定木を利用した「MR 活動に関する医療関係者の意識調査」 アンケート調査報告書に関する解析の試み

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## Medical drug information activity expected of MR An approach using the decision tree about the report of a “ questionnaire survey of medical workers' awareness of MR activity ”

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( Received December 13, 2004 )  
( Accepted February 25, 2005 )

### Abstract

**Objectives:** In March 2004, the MR Education and Accreditation Center of Japan carried out a questionnaire of physicians/pharmacists and published a report on the “ questionnaire survey of medical workers' awareness of medical representative (MR) activity ”. Based on data obtained by this questionnaire survey, we performed analysis by decision trees technique (also called partitioning) as a method of data mining and profiling of physicians/-pharmacists for where they acquired medical drug information and how they recognized the contents of data provided by the MR, to find characteristic items in medical information activity by the MR concretely.

**Methods:** A questionnaire was carried out by randomly selected physicians and pharmacists under the sponsorship of MR Education and Accreditation Center of Japan on June, 2003. The all data set was divided into the training data set (515 for physicians and 500 pharmacists) and the test data set (27 for physicians and 26 for pharmacists). The predictive model was developed the recursive partitioning using statistical software (JMP 5.1.1J). The accuracy of this model was estimated both internal check and external check.

**Results:** As a result, irrespective of the institution scale, physicians were interested in the dissemination of “ new EBM-based information of drugs of interest ”. In addition, employed physicians in hospitals with 1,000 beds or more were interested in the dissemination of “ organized information that is easy to explain for medication consultation ”. Employed physicians in hospitals with 20-199 beds or 500-799 beds were interested in the dissemination of “ latest information on the development state of drugs, and the trends of medical associations and medical treatment ”. Unlike physicians, pharmacists were interested in the dissemination of “ organized information that is easy to explain for medication consultation ”, irrespective of the institution scale. Employed pharmacists in hospitals with 200-499 beds or 800 beds or more were interested in “ reliable comparative information on drugs including similar products ” and “ information on the use of drugs such as drug interactions ”. Employed pharmacists in hospitals with 20-199 beds or 500-799 beds as with physicians were interested in the dissemination of “ latest information on the development state of new drugs and trends of medical associations and medical treatment ”.

**Conclusions:** Thus, we clarified physicians' and pharmacists' profiling for their recognitions of medical drug information activity by the MR. The constructed judgment rules may be practically applicable.

**Key words:** Medical representative, drug information, dissemination, decision tree, partitioning