

Development of the Drug Abuse Health Information System in Thai Community

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Abstract : Drug addiction represents one of the most important public health issues in both developed and developing countries. The purpose of this study was to develop a drug abuse health information in a community in Northern Thailand using developmental research design. The developmental researchers performed four phases to develop drug abuse health information, including 1) synthesizing knowledge related to drug abuse prevention and identifying the components of drug abuse health information; 2) developing the system in mobile application and website; 3) implementing drug abuse health information in the rural community; and 4) evaluating the feasibility of drug abuse health information. Data collection involved both qualitative and quantitative procedures. The qualitative data and quantitative data were analyzed using content analysis and descriptive statistics, respectively. The findings of this study showed that drug abuse health information consisted of five sections, including drug-related prevention knowledge for teens, drug-related knowledge for adults and professionals, the database for drug dependence treatment centers, self-administered questionnaires, and supportive counseling sections. First, in drug-related prevention knowledge for teens, the developmental researchers designed four infographics and animation to provide drug-related prevention knowledge, including types of illegal drugs, causes of drug abuse, consequences of drug abuse, drug abuse diagnosis and treatment, and drug abuse prevention. Second, in drug-related knowledge for adults and professionals, the developmental researchers developed many documents in a form of PDF file to provide drug-related knowledge, including types of illegal drugs, causes of drug abuse, drug abuse prevention, and relapse prevention guideline. Third, database for drug dependence treatment centers included the place, direction map, operation time, and the way for contacting all drug dependence treatment centers in Thailand. Fourth, self-administered questionnaires comprised preventive drugs behavior questionnaire, drug abuse knowledge questionnaire, the stages of change readiness and treatment eagerness to drug use scale, substance use behaviors questionnaire, tobacco use behaviors questionnaire, stress screening, and depression screening. Finally, for supportive counseling, the developmental researchers designed chatting box through which each user could write and send their concerns to counselors individually. Results from evaluation process showed that 651 participants used drug abuse health information via mobile application and website. Among all users, 48.8% were males and 51.2% were females. More than half (55.3%) were 15-20 years old and most of them (88.0%) were Buddhists. Most users reported ever getting knowledge related to drugs (86.1%), and drinking alcohol (94.2%) while some of them (6.9%) reported ever using tobacco. For satisfaction with using the drug abuse health information, more than half of users reflected that the contents of drug abuse health information were interesting (59%), up-to date (61%), and highly useful to their self-study (59%) at high level. In addition, half of them were satisfied with the design in terms of infographics (54%) and animation (51%). Thus, this drug abuse health information can be adopted to explore drug abuse situation and serves as a tool to prevent drug abuse and addiction among Thai community people.

Keywords : drug addiction, health informatics, big data, development research

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