ORAL 16 [ID#152]

Exploring User Satisfaction for Malaysian Toxicological System using System Usability Scale Analysis

Yulita Hanum P Iskandar[1], Halilol Rahman Mohamed Khan[2], Mohamed Isa Abd Majid[2], Adilah Mohamed Ariff[2], Rosman Ahmad[2], Gururajaprasad Kaggal Lakshmana Rao[3]

1. Graduate School of Business, Universiti Sains Malaysia, Malaysia
2. National Poison Centre, Universiti Sains Malaysia, Malaysia
3. Advanced Medical and Dental Institute, Universiti Sains Malaysia, Malaysia

OBJECTIVE: Poison Information System known as MyToxData System was developed to enhance the management of the toxicology-related services and to find solutions on the issues related to the collection of toxicology case data in Malaysia. The system which stands for Malaysian Toxicological Database is a local system for poisoning case notification and statistics as well as database of chemical products and clinical information retrieval. Thus, the objective of this paper is to assess the usability of MyToxData system among healthcare professionals in Malaysian Hospitals.

METHODS: An online questionnaire using JotForm was distributed among healthcare professionals in Malaysian Hospitals. The participants were asked to perform tasks on MytoxData system before rating their usability questionnaire. Questionnaire of System Usability Scale (SUS) developed by Brooke (1996) was used to collect the user's subjective rating of system usability. The SUS comprised of twelve items, each having a five-point scale that ranged from Strongly Disagree to Strongly Agree. The collected data were then analysed using the SPSS software package.

RESULTS: 23 healthcare professionals from government hospital (GH), government hospital (district), and others participated in the study. The result of the measurements was found to be reliable with a coefficient alpha of more than .89 for every construct. Overall the usability scores for MyToxData system was high with mean = 20.5 and standard error =0.72. One sample T-test found that all the constructs for usability including accuracy, content, ease of use, format, and timeliness were found significant with $p<0.005$.

CONCLUSION: The usability results showed a positive user experience with better usability of MyToxData system. This showed that the system played a vital role in the acceptance, satisfaction, and efficiency amongst healthcare professionals. Thus, MyToxData system was found to be a highly robust and versatile system for the management of toxicology-related services.