Knowledge and Perceptions on Casemix System Among Information Technology Staff of Hospitals in Malaysia and Indonesia.

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Introduction

Knowledge and Perceptions (K&P) of health plays an important role in adopting the new technologies and practices. Deficiencies in K&P towards Casemix can lead to misunderstanding and possible delay in implementation of the system. Meanwhile, Information Technology (IT) is one of the important components in implementing Casemix hospitals. Casemix System has also become an essential tool in managing the hospital. This study is focussed on assessing the K&P among the hospital IT staff to assess their capacity reflecting support to casemix system that might impact on sustainability of the system.

Methods

The study was conducted among 243 IT staffs from various hospitals located in Malaysia and Indonesia using a cross sectional; using a standardised locally experts' validated questionnaire. Users' Knowledge, Attitude and Perception were determined from respondents using a Likert response scale. Alpha reliability analysis showed an acceptable value of 0.722 for 10 items on knowledge, 0.802 for 12 items on attitude, 0.710 for 10 items on perception and 0.687 for combined 32 items. The p value of less than 0.05 was taken as significant. Median score were taken as the cut-off point for determination of high and low Knowledge Attitude and Perception level. The respondents were participants of a series casemix training workshops conducted by International Centre for Casemix and Clinical Coding (ITCC) of National University Malaysia in 2014. ITCC has been involved in providing capacity building programme in Malaysia and Indonesia since 2005. All IT staff attended 15 training casemix training workshops in Malaysia and Indonesia were selected and included in the study.

Results

There were two hundred and forty three (243) questionnaires distributed to the hospital IT staff. The response rate is 100%. Among the respondents, 106 (44%) are male, and 135 (56%) are female. Respondents from Indonesia dominated at 84.2% and the rest were from Malaysia. Respondents from the provincial level hospitals dominated at 76.1 % while the remaining respondents (23.9%) were from regional and districts hospitals. Age was normally distributed at 35.27 (SD= 7.55) years and a median year of experience with casemix system was only 2.07 (IQR= 1) year. There was no significant relationship between age, gender, years of experience and hospital types with the score of Knowledge and Perceptions. However using the Pearson Correlation test there was a positive significant correlation between users Knowledge and Perception. Respondents with high Knowledge score are more likely to have positive perceptions towards casemix (p < 0.01). Assessment on the IT staff's experience showed that 48.1 % of them felt that they had inadequate Casemix training; 18.1 % expressed doubts on diagnosis and procedure coding; 33.7% was unsure if Casemix groups have any impact on their hospital tariff; 25.9% agreed that their hospitals did not had good costing data; 35.9% agreed that clinicians put up resistance in clinical pathways implementations; 33.3% agreed that National Casemix Centre (NCC) has provided support for Casemix implementation and 63.4% agreed that Casemix system expedited the claims process.

Conclusions

Knowledge was proven to be positively correlated with Perception. However other variable were not associated with IT staff's Knowledge or Perception. In addition, a huge number of respondents experienced that the Casemix grouper is user friendly, and felt that they must be sufficiently trained in the Casemix. Continuous training is essential to enhance users' knowledge and skills. This will influence users perception and enhance their support for smooth implementation of Casemix system.

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