

0847

A STUDY ON COMPREHENSIVE EVALUATION METHODS OF THE QUALITY OF INJURY SURVEILLANCE BASED ON CHINESE HOSPITAL

L Li*, X Liu, J Yang, M Yu Correspondence: Injury Prevention Research Center, Medical College of Shantou University, No.22 Xin Ling Road, Shantou 515041, P.R. China, China

10.1136/ip.2010.029215.847

Objectives Injury is an important public health problem, and injury surveillance is the first and important step of injury prevention, so evaluation of its quality is crucial. Our aim is to find one suitable, convenient comprehensive evaluation method so as to understand the quality of injury surveillance based on hospital, and to improve the data of injury surveillance, thereby to provide scientific proves to government formulating preventive strategies.

Methods To conduct an investigation of injury surveillances impacting quality factors according to the unified method for the selected hospital and injury patients, and the influencing factors of injury surveillance quality were evaluated by technique for order preference by similarity to ideal solution (TOPSIS), rank sum ratio (RSR), close-value method, self-organisation neural network, grey relational analysis (GRA) and the fuzzy comprehensive evaluation. Compared these results with actual quality, we found the suitable, convenient, comprehensive evaluation method. After verified in three other hospitals, the evaluation method will be adjusted and optimised.

Results The correlation between the result of GRA and actual quality is significant ($r=0.750$, $p=0.020$), also the correlation between actual quality and WHO evaluation results ($r=0.767$, $p=0.016$). There were no significant correlation between other methods and actual quality. After verified, the three leading orders of actual results are similar with GRA results. The correlation coefficient is 0.883 ($p=0.002$).

Conclusion GRA is suitable for evaluating the quality of injury surveillance system, and can evaluate the quality with convenience and fast, so as to improve the quality of data, and provide scientific proves to injury prevention.