

Important Factors Affecting the Effectiveness of Quality Control Circles

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Abstract : The present study aimed to identify important factors affecting the effectiveness of quality control circles in a hospital, as well as rank them using a combination of fuzzy VIKOR and Grey Relational Analysis (GRA). The study population consisted of five academic members and five experts in the field of nursing working in a hospital, who were selected using a purposive sampling method. Also, a sample of 107 nurses was selected through a simple random sampling method using their employee codes and the random-number table. The required data were collected using a researcher-made questionnaire which consisted of 12 factors. The validity of this questionnaire was confirmed through giving the opinions of experts and academic members who participated in the present study, as well as performing confirmatory factor analysis. Its reliability also was verified ($\alpha=0.796$). The collected data were analyzed using SPSS 22.0 and LISREL 8.8, as well as VIKOR-GRA and IPA methods. The results of ranking the factors affecting the effectiveness of quality control circles showed that the highest and lowest ranks were related to 'Managers' and supervisors' support' and 'Group leadership'. Also, the highest hospital performance was for factors such as 'Clear goals and objectives' and 'Group cohesiveness and homogeneity', and the lowest for 'Reward system' and 'Feedback system', respectively. The results showed that although 'Training the members', 'Using the right tools' and 'Reward system' were factors that were of great importance, the organization's performance for these factors was poor. Therefore, these factors should be paid more attention by the studied hospital managers and should be improved as soon as possible.

Keywords : Quality control circles, Fuzzy VIKOR, Grey Relational Analysis, Importance-Performance Analysis

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