

Establishment of Environmental Performance Evaluation Indicator System for Health Institution in Taiwan

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ABSTRACT

Abstract In recent years, the environmental management system had been established. It is also one policy of environment protection promoted by internal medical institutes. However, there is no specific and effective way to demonstrate the achievement of environmental management system, after execution. The purpose of our research is to build assessment system of environmental management, according to the standard of the ISO 14031. The subject is our internal medical institutes. Multiple indicator should be made according by the experience of the experts and the laws. The questionnaire should be made to collect, analyze and study the data of environmental management status and effectiveness at all levels of domestic medical institutions. We suppose to demonstrate completely performance, to show understanding of the actual management of medical institutions and to improve the practical need. Based on collected information and questionnaire of experts, the assessment system of environmental management for the Institute of medical institutes had been established including four directions and 82 indicators. Through investigation of the questionnaire from the medical institutions and importance analysis, we can achieve the scores of all indicators and the priority of the improvements. Based on the evaluation of teaching hospitals certified by the Department of Health of the Executive Yuan during 91 to 95, there are about 150 the regional medical institutes and medical institutes superior to regional medical institutes. After sampling, 148 questionnaires had been sent to them and 101 questionnaires had been recovered. The recovery rate was 68.24%. By effective use of SPSS statistical software, the descriptive statistics, and a single sample t-test is proceeded. The recommendations, as reference for performing the assessment system of environmental management in our medical institutions had been made as follow: 1. By the important - performance analysis, we know the overall performance scores of the expert 's questionnaire is higher than the scores of the hospital questionnaire at the four direction. After finishing statistical data, the improvement priorities are as follows: Direction one: The first three improved indicators of practice-oriented direction: the amount of recycling of paper, the amount of recycling of aluminium and iron cans, control indicator of disease-mediated Mosquito. Direction two: The first three improved indicators of the technical operations direction: the percentage of the number of legal qualified waste processing agent(%), laboratory liquid waste classification and storage suitability, laboratory liquid waste removal, and suitability of process. Direction three: The first three improved indicators of administration-management direction: suitability for the standards of the liquid discharge, the frequency of the waste inspection of time (times / month), the frequency of violations of environmental laws (times / year). Direction four: The first three improved indicators of the maintenance and administration direction: the frequency of the maintenance and repair of machines (times / month), the completion rate of the execution based on the program(%), the execution rate of the hospital landscape and the weeding and clipping of the plant(%). The performance and the improved indicators of all direction are clear. It is a basis for continuous improvement in the assessment. 2. By the assessment system of the environmental management, the average scores of performance around the province is 68.93 points. Through single sample t-test, the overall performance of environmental e assessment is fair. 3. The different geographical regions get different scores of the environmental performance. Through the ANOVA, Eastern (70.57), North (70.46), and Southern (68.72) get higher scores and Central (65.93) gets lower scores. The results reach the statistical significance. 4. By analysis of the questionnaire, we realized the statistically significant difference scores at questionnaire of environmental assessment is due to different location, different scale and whether to participate in "green hospital" or not. 5. The relation of practice-oriented direction, technology-oriented direction, and administration-management-oriented direction show significant positive correlation by person's correlation analysis. 6. The assessment system of the environmental management established by our study is not suitable for all types of medical institutes. Except required by the law, this system could be set up according to region of medical institutions, the scale of hospitals and hospital policy. It would give priority of execution and improvement of environmental management. Key Words : Hospital Environmental Management, Establishment of Environmental Performance, IPA

Keywords : Establishment of Environmental Performance

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