The Effects of FOCUS-PDCA Methodology on Emergency Department Patient Disposition Index

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Abstract

Introduction: Hospital emergency is an important and unique department and prolonged stay of the patients in this ward leads to a decrease in the ability to serve other patients in need. Therefore, this study aimed to evaluate the ability of FOCUS-PDCA methodology to decrease waiting time of the procedures and improve index of decision-making within 6 hours in emergency department (ED). Methods: In this interventional before-after study, the effect of FOCUS-PDCA methodology on waiting time of the procedures and decision-making was evaluated in the ED of Sina Hospital, Tabriz, Iran in a 5-month period. Initially, a team of procedure definers defined the problematic procedures and suggested practical solutions to relieve them. Then, these solutions were practiced using appropriate programming, and finally the effects of these measures were analyzed using SPSS version 11.5 and independent t-test. Results: 5 months after intervention, mean waiting time for receiving consultation was reduced from 28.1 to 17 minutes (p < 0.001) and mean time for the results of a laboratory test to be ready was reduced from 70.26 to 37.66 minutes (p = 0.006). The number of patients who stayed in the ED for more than 6 hours, which was 101 in April, decreased to 52 in November (p = 0.002). The index of patient disposition in less than 6 hours increased from 94.71% in April to 96.87% in November. Conclusion: Based on the results of this study, it seems that carrying out FOCUS-PDCA methodology can decrease waiting time of the procedures and improve patient disposition index in the ED.

Keywords: Emergency service, hospital; quality improvement; patients