Interdisciplinary Collaboration for Investigating Medication Errors Causes: Six Sigma Methodologies

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Abstract:

BACKGROUND: Organizations which engaged in continuous improvement to improve outcomes had certain key factors such as having a quality-centered culture, and to overcome barriers directly involve top and middle-level leaders, integrating improvement efforts with organizational priorities,and actively developinginterdisciplinary teamsfor continuous improvement. **AIM:** Study aimed to (1) assess hospital team in tracing medication errors causes using incident report and (2) investigate medication errors through using six sigma methodologies among nursing staff.**SUBJECT AND METHODS**: A retrospectivedescriptive research design was used, study setting were in As-Salam international Hospital. The study was conducted by retrospectively auditing of total hospital incident report (n. 679). Two tools were used for collecting data: (1) medicationincident report and (2) quality improvement toolsas brainstorming technique, process map, Pareto chart test, and cause and effect diagram. **RESULTS**: The study results showed that, regarding to the overall causes, medication administration errors was the highest percentage among all causes (52%), and according to Pareto test missed dose cause was the highest percentage of medication administration errors **(**60.4%), while root causes of medication administration errors revealed that the process itself as well as the human factors were the main root causes. **CONCLUSION**: The current study had accepted the research hypothesis by evidence that, interdisciplinary team by using Six sigma can identify the root cause of medication administration errors inside the hospital which is missed dose in addition to the process itself as well as the human factors were the major causes. **RECOMMENDATION:** It is recommended that, quality improvement advancing program and peer review should be implemented to assist in identifying causes of errors and eradicating its recurrence. All managerial categories should be engaged in the improvement process to get their commitment to quality standards. Staff nurses educate about medication administration should be conducted. Training on improvement process should be provided to increase awareness and force the internal auditing at unit level.

Keywords: *Interdisciplinary team, Incident report, Six Sigma, Medication errors.*