A systematic review: Business process reengineering to reduce waiting time in outpatient department

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Long waiting time for patient in out-patient department of healthcare becomes important in healthcare process of service nowadays because of highly demand for improvement of quality and safety in healthcare. Many studies had been done to analyze the most effective method to reduce patient waiting time in outpatient department; some of them used Six Sigma, Lean and combination of both methods. This review aims to compare the results of business process reengineering through Six Sigma method, Lean method and combination of both, in reducing outpatient's waiting time. Systematic Review is performed to compare studies about waiting time in outpatient department (OPD) using Six Sigma method, Lean method and combination of both in health care systems. The search of journals used ProQuest, Springer and Emerald database with only journals from 2013 to 2016 that being included for this review. From 6 selected studies, there are 2 studies using Six Sigma method, 3 studies using lean tools and 1 study using lean six-sigma. In six-sigma method, patients average waiting time in Columbia and Taiwan were reduced about 40.7% and 56%. While in Lean method in Tanzania, India and South Africa the patients average waiting time were reduced about 40.7%-56%. In Lean Six Sigma method in India, the project has shown a 94% reduction in patients’ average waiting time. The findings of this study show the methods that used give significant effect in reducing waiting time, the combination of Six Sigma and Lean have a greater impact in reducing patients’ average waiting time based on the studies. The Lean Six Sigma method has more dramatic reductions in patients waiting time in outpatient department process based on the review. But the other methods still have significant value too in reducing patients waiting time.

Biography
Ariani Khairunnisa Nasution is a Hospital Manager in An-Nisa Hospital, Tangerang, Indonesia. Presently, she is pursuing Magister Hospital Administration Program, Faculty of Public Health, University of Indonesia. She also has an experience in hospital and healthcare management field for 4 years, where she has focused in business development in healthcare to support better quality and improvement in health care service.

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