

INTISARI

Peningkatan kebutuhan fasilitas kesehatan di Provinsi Banten, khususnya di Kabupaten Tangerang, mendorong pembangunan infrastruktur rumah sakit, termasuk bangunan *Inpatient Department* (IPD) Rumah Sakit Suci Paramita. Dalam pelaksanaan konstruksi proyek tersebut ditemukan berbagai ketidaksesuaian mutu (*defect*) pada pekerjaan *finishing* arsitektur seperti dinding, lantai, dan plafon, yang berdampak terhadap kualitas serta kenyamanan bangunan. Penelitian ini bertujuan untuk mengidentifikasi jenis *defect* dominan, menganalisis faktor penyebab utamanya, serta merumuskan langkah-langkah perbaikan dan pengendalian mutu dengan menggunakan metode *Six Sigma* melalui pendekatan DMAIC (*Define, Measure, Analyze, Improve, Control*).

Penelitian ini menggunakan metode observasi non-partisipatif terhadap pekerjaan *finishing* pada Gedung IPD Rumah Sakit Suci Paramita, yang meliputi pekerjaan plesteran, acian, pengecatan, pemasangan keramik, dan plafon. Data hasil observasi dianalisis secara kuantitatif menggunakan perhitungan *Defects per Unit* (DPU), *Defects per Million Opportunities* (DPMO), dan tingkat sigma, serta secara kualitatif menggunakan analisis Pareto dan *fishbone diagram* untuk menentukan kemungkinan akar penyebab permasalahan.

Hasil penelitian menunjukkan bahwa pekerjaan dinding memiliki tingkat defect tertinggi dengan nilai sigma sebesar 3,3, sedangkan pekerjaan lantai dan plafon masing-masing memiliki nilai sigma 4,4, yang menunjukkan kualitas cukup baik namun masih memerlukan pengendalian. Faktor penyebab utama terjadinya *defect* kemungkinan disebabkan oleh keterampilan tenaga kerja yang kurang memadai, metode kerja yang belum sepenuhnya sesuai prosedur, serta pengawasan mutu yang masih kurang optimal di lapangan. Tahap *improve* menghasilkan rekomendasi berupa peningkatan pelatihan tenaga kerja, penerapan prosedur kerja sesuai SOP, serta inspeksi mutu berkala. Pada tahap *control*, disarankan pelaksanaan sistem *monitoring* dan evaluasi secara berkala untuk menjaga konsistensi hasil pekerjaan.

Secara keseluruhan, hasil penelitian ini menunjukkan bahwa penerapan metode Six Sigma memiliki potensi untuk digunakan sebagai alat analisis dan pengendalian kualitas pada pekerjaan *finishing* bangunan. Namun, efektivitas penerapannya masih perlu diuji lebih lanjut melalui implementasi langsung dan evaluasi berkelanjutan pada proyek konstruksi sejenis di masa mendatang.

Kata kunci: Pengendalian kualitas, *defect* konstruksi, pekerjaan *finishing*, *Six Sigma*, DMAIC, Rumah Sakit Suci Paramita.

ABSTRACT

The increasing demand for healthcare facilities in Banten Province, particularly in Tangerang Regency, has driven the development of hospital infrastructure, including the construction of the Inpatient Department (IPD) building at Suci Paramita Hospital. During the construction process, various quality nonconformities (defects) were identified in the architectural finishing works, such as walls, floors, and ceilings, which affected both the quality and comfort of the building. This study aims to identify the dominant types of defects, analyze their main possible causes, and formulate improvement and quality control measures using the Six Sigma method through the DMAIC (Define, Measure, Analyze, Improve, Control) approach.

This research employed a non-participatory observation method focusing on finishing works in the IPD building of Suci Paramita Hospital, including plastering, smoothing, painting, ceramic installation, and ceiling works. The collected observation data were analyzed quantitatively using Defects per Unit (DPU), Defects per Million Opportunities (DPMO), and sigma level calculations, as well as qualitatively using Pareto analysis and fishbone diagrams to determine the possible root causes of the problems.

The results show that wall works exhibited the highest defect rate with a sigma value of 3.3, while floor and ceiling works each achieved a sigma value of 4.4, indicating a fairly good level of quality but still requiring control improvements. The main possible causes of the defects were inadequate worker skills, work methods that did not fully comply with procedures, and suboptimal quality supervision in the field. The improvement stage produced recommendations including enhanced worker training, implementation of standard operating procedures (SOPs), and periodic quality inspections. In the control stage, it is recommended to implement a regular monitoring and evaluation system to maintain consistent work quality.

Overall, the findings of this study indicate that the application of the Six Sigma method has potential as an analytical and quality control tool for building finishing works. However, its effectiveness still needs to be further validated through direct implementation and continuous evaluation in similar construction projects in the future.

Keywords: *Quality control, construction defects, finishing works, Six Sigma, DMAIC, Suci Paramita Hospital.*