



PENGELOLAAN WASTE PADA ALUR PELAYANAN KEMOTERAPI RAWAT JALAN (ONE DAY CARE) DI RUMAH SAKIT KANKER DHARMAIS

ABSTRAK

Latar belakang : Kemoterapi merupakan salah satu modalitas utama dalam pengobatan kanker. Kemoterapi rawat jalan dinilai lebih praktis dan nyaman oleh sebagian besar pasien. Survey Indeks Kepuasan Masyarakat (IKM) tahun 2021 menunjukkan keinginan pasien untuk mendapatkan pelayanan yang lebih cepat. Disisi lain, terdapat kesenjangan antara permintaan pasar yang semakin besar dengan keterbatasan fasilitas kemoterapi rawat jalan. Hal ini berdampak pada keterlambatan pemberian kemoterapi. Salah satu solusi adalah menerapkan manajemen *lean* untuk memperpendek waktu dan meningkatkan efisiensi proses pelayanan.

Tujuan : Mengimplementasikan manajemen *lean* dalam mengidentifikasi dan menghilangkan atau mengurangi *waste* untuk memperbaiki waktu proses dan efisiensi alur pelayanan kemoterapi rawat jalan.

Metode : *Action Research* dengan pengambilan sampel secara *consecutive sampling*. Analisis data kuantitatif dilakukan dengan menguji beda *mean lead time*, *Value Added Ratio (VAR)* pada alur pelayanan kemoterapi rawat jalan antara sebelum dan sesudah intervensi.

Hasil dan Pembahasan : Pada awal observasi melalui *gembira walk* dapat diidentifikasi *waste* sepanjang alur proses pelayanan yang meliputi : *defect, over production, waiting* dan *motion*. Terdapat 2 tahapan proses yang terutama memerlukan perbaikan dikarenakan memiliki *cycle time* paling lama yaitu bagian pemesanan obat dan pemberian agen sitostatika. Setelah dilakukan intervensi terdapat perbaikan rerata *lead time* dari 304,8 menit menjadi 258,2 menit dan efisiensi *value added ratio (VAR)* dari 77,87% menjadi 7,27%.

Kesimpulan : Implementasi manajemen *lean* mampu mengidentifikasi *waste* yang terjadi selama proses pelayanan dan juga berdampak terhadap perbaikan *waste* tersebut, yang ditunjukkan sebagai perbaikan waktu proses pelayanan (*leadtime*) dan efisiensi proses pelayanan (VAR). Implikasi klinis adalah tersedianya tambahan slot kemoterapi sebanyak 15 slot untuk jenis regimen platinum. Potensi ini akan memperbaiki keterlambatan kemoterapi sebesar 25% sehingga pemberian yang lebih teratur mampu meningkatkan efektivitas pengobatan.

Kata kunci : kemoterapi rawat jalan, manajemen *lean*, *leadtime*, *value added ratio (VAR)*



THE WASTE MANAGEMENT OF ONE-DAY CARE CHEMOTHERAPY SERVICE IN DHARMAIS CANCER HOSPITAL

ABSTRACT

Background: Chemotherapy is one of the main modalities in cancer treatment. One-day care chemotherapy is considered more practical and comfortable by most patients. A survey conducted in 2021 by the Community Satisfaction Index (*Index Kepuasan Masyarakat/IKM*) revealed that patients desired faster service. On the other hand, there is a discrepancy between the limited one-day care chemotherapy facilities and the growing market demand. This caused the delay in administering chemotherapy. Implementing *lean* management is one of the solutions to shorten service time and improve the efficiency of the service process.

Objective : Implementing *lean* management in identifying and eliminating or reducing *waste* to improve time and efficiency of one-day care chemotherapy service flows.

Methods : Action Research with consecutive sampling as its sample obtaining method. Quantitative data analysis was conducted by testing the difference in mean lead time, Value Added Ratio (VAR) in the one-day care chemotherapy service flow between before and after interventions.

Results and Discussions : At the first observation using Gemba walk, the *wastes* identified along the service flows included: defect, overproduction, waiting, and motion. There were 2 stages of the process that needed the most improvement because they took the longest cycle time, which was the drug ordering stage and the administration of cytostatic agents stage. After the interventions, there was an improvement in the average lead time from 304.8 minutes to 258.2 minutes and the efficiency value-added ratio (VAR) from 77.87% to 79.27%.

Conclusion : *Lean* management implementation was able to identify *waste* occurring during the service flows which also improved the *waste* itself, shown by the improvement of the service flow time (lead time), and the efficiency of the service process (VAR). The clinical implication was the 15 additional chemotherapy slots for platinum regimen type. This result potentially improved chemotherapy delay by 25%, therefore, more regular administration of chemotherapy could be done and would increase the effectiveness of the treatment.

Keywords : one-day care chemotherapy, *lean* management, lead time, value-added ratio (VAR)