

ABSTRAK

Latar Belakang: Kanker pada anak memiliki morbiditas dan mortalitas yang tinggi. Retinoblastoma merupakan tumor padat terbanyak pada anak di RSCM. Kemoterapi merupakan salah satu modalitas terapi, interdisiplin dan banyak prosedur. Manajemen *lean* secara berkelanjutan mengurangi *waste* dan meningkatkan alur kerja. Manajemen *lean* penting diterapkan pada layanan kemoterapi anak untuk meningkatkan efisiensi dan kualitas pelayanan.

Metode Penelitian: Penelitian *action research* dilakukan di RSCM Agustus-September 2019. Pengambilan sampel dengan *purposive sampling* yang mewakili peran dalam alur proses pelayanan. Pedoman observasi menggunakan lembar pengamatan *cycle time*, lembar analisis *value-added*, *waiting time* dan *lead time*. *Waste* yang ditemukan dicantumkan dalam matriks DOWNTIME. Dilakukan observasi layanan kemoterapi anak rawat inap kemudian dilakukan diagnosis menggunakan *Value Stream Mapping*. Tim Kaizen berisi petugas farmasi, perawat, dokter melakukan *plan-do-study-action*, disusun rencana intervensi, dan dilakukan pengamatan post-intervensi. Metoda 5S digunakan untuk memperbaiki alur pelayanan.

Hasil: Penelitian dilakukan pada pasien Retinoblastoma sebanyak 7 pasien pre-intervensi dan 16 pasien post-intervensi dengan usia rerata 3 tahun. *Waste* ditemukan dengan kategori *Defect*, *Overproduction*, *Waiting*, *Non-utilized talent*, *Motion*, dan *Extraprocessing*. *Value added time* mengalami penurunan pada pembuatan order kemoterapi (82%), pembuatan keputusan kemoterapi (59%) dan pembuatan resume (41%). *Waiting time* mengalami penurunan pada pembuatan order kemoterapi (56%) dan keputusan kemoterapi (55%). Masih ditemukan *waiting time* meningkat pada pemberian kemoterapi hari II sebesar 259%. *Lead time* sebelum implementasi berubah dari 48 jam 36 menit menjadi 38 jam 38 menit. Terjadi efisiensi pada proses layanan kemoterapi anak rawat inap dengan VAR dari 33% menjadi 37%.

Kesimpulan: Layanan kemoterapi anak rawat inap di RSCM lebih efisien setelah dilakukan intervensi dengan penerapan manajemen *lean*.

Kata kunci: Manajemen *lean*, kemoterapi, rawat inap, rumah sakit

ABSTRACT

Background: Pediatric chemotherapy administration is a multiphase process that requires several stages and procedures. As a result, the administration of chemotherapy in children becomes the perfect target for the application of the lean management method. This study used lean management to determine the efficiency of health care in teaching hospital.

Method: An action research study was done in Cipto Mangunkusumo Hospital using purposive sampling. The study observation using the cycle time observation sheet, value added analysis sheet, waiting time and waiting time. Waste was documented in the DOWNTIME matrix. After undergoing treatment, chemotherapy for inpatient children is then diagnosed using Value Stream Mapping. A Kaizen team consisting of pharmacists, nurses, doctors conducts plan-do-study-action, prepares intervention plans, and carries out post-intervention examinations. Method of 5S was used to improved process.

Results: In this study, patients with retinoblastoma in class III inpatient ward included were 7 patients in the pre-intervention group and 16 patients in the post-intervention group with mean aged 3 years. Major decreases in lead time happened in the subprocesses of ordering chemotherapy (75%), decision-making of chemotherapy administration (55%) and filling of the resume (41%). There was still increased waiting time in second day chemotherapy administration (259%). Lead time process in chemotherapy administration for retinoblastoma changed from 48 hours, 36 minutes (more than 2 days) to 38 hours, 38 minutes (1.6 days or less than 2 days). The efficiency of the process was measured using value added ratio which showed changes from 33% to 37%.

Conclusion: Lean management applied in the process of chemotherapy administration in the inpatient wards increased the efficiency of the process. This is supported by the finding of increase in value added ratio from 33% to 37%.

Keywords : lean management, chemotherapy, inpatient