



Lean Management Implementation Training at The Pharmaceutical Unit of Islamic Hospital in Surabaya

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Abstract

Lean management is one of the sufficient methods often used by an organization, company or agency certain. this method is claimed capable to make a company capable increase the quality of the product more efficient. The problems faced by the Surabaya Islamic Hospital are: Currently, the difference cost operational with income at RSI Surabaya A. Yani is only 15%-17%, while policy directors want a difference the can to 30%, The goal of devotion Public this give Lean management training at the Pharmacy Unit of the Surabaya Islamic Hospital expected training this could give benefit related to governance effective and efficient pharmacy so that could increase quality service and profitability. Training this use method lecture, discussion as well as simulation involving 18 workers from the pharmacy unit consisting of 5 Pharmacists and 13 pharmacists. From devotion Public this There are much Lean Management Training at the Pharmacy Unit of the Surabaya Islamic Hospital give benefit to participants, increase knowledge increasing participants by 18% expected could make more service effective and efficient that could increase quality service and profitability management.

Keywords: Pharmacy, Effective, Efficient, Lean Management

1.Introduction

Providing pharmaceutical services and being responsible for patients related to pharmaceutical supplies including quality and quality medicines and medical consumables with the aim of achieving optimal results in improving the quality of life of patients is the task of the Pharmacy Unit of the Surabaya Islamic Hospital. in providing 24-hour service for emergency, outpatient, and inpatient care.

The application of Lean Hospital Pharmacy can be carried out to ensure efficiency at every stage of pharmacy practice (Restudana & Darma, 2022). Lean

is not about “downsizing” or reducing the number of employees. Lean is about having the right resources, in the right places to do the work that meets the customer's needs, at the best quality and at the right time (Triyani, 2019). From the customer's point of view, the value that is assessed as a whole is the minimum time from when the prescription is given until the drug is received. So the main goal is to increase patient satisfaction by minimizing lead time when processing drug prescriptions (Rochimah, 2018)

The implementation of lean management carried out successively is discussing a work plan to get support from management (director's circular), selecting polyclinics that can support the use of electronic prescriptions, coordinating with polyclinic heads and communicating with specialist doctors regarding plans for eliminating physical prescriptions and full use of electronic prescriptions (Atikah et al., 2021). -his. In this implementation, poly ob-gy was chosen which relatively had the same type of drug and rarely took the form of a compound (Zahra, 2015). The results are (1) TTK simply looks at the electronic prescription in printed form (the drug name is clearly written), (2) nurses do not need to do this because it is not allowed and there is a potential for prescriptions to be confused, (3) there is no need to use drug delivery services due to waiting time. fast so that patients receive pharmacist education and (4) waiting time for drugs to be less than 5 minutes where the standard waiting time for drugs is a maximum of 30 minutes. and the concoction menu) and the large distance between the TTK in the recipe reception section and the preparation section so that it adds to the waste (motion).

Lean management is something the method used by the company can increase quality production, increase its value and also reduce existence wastage. The main goal of the method is for the sake of reducing frequent wastage that occurs from side time, budget, and resources power. Besides that, the lean method will also more focus on spare time to use increase quality production. For that, in increase lean method should also capably produce more products quality and not eat too much cost a lot. Broadly speaking, companies that take advantage of method this must prioritize level products based on existing demand, not on supply. Long waiting times in preparing drug prescriptions often make patients complain, and a sense of dissatisfaction will result in patients not wanting to use our hospital services anymore. Lean Management Workshop in the Pharmacy Unit which is attended by pharmacy and pharmaceutical technical personnel is expected to provide insight related to efficiency in work so as to reduce waiting time.

As house standing pain since 1975, RSI Surabaya A. Yani has continued to develop in serve the health of the people of Surabaya. Various efforts Keep going conducted following development technology and regulations government is often fickle. The impact of this era of uncertainty makes house sick must fast intake decisions and do efficient various source financing. Currently, _ the difference cost operational with income at RSI Surabaya A. Yani is only 15%-17%, while policy

directors want a difference the can to 30%. To realize Thing, efficiency must conduct various sources of financing, one of which is in the pharmacy unit. Purpose of devotion Public this give Lean management training at the Pharmacy Unit of the Surabaya Islamic Hospital expected training could give benefit related to governance effective and efficient pharmacy so that could increase quality service and profitability management.

2. Method

The Pharmacy Unit of the Surabaya Islamic Hospital is an installation pharmacy located at Islamic Hospital Surabaya, on A. Yani Street No. 2 – 4. This Pharmacy Unit serves less than 400 sheets of a recipe per day good from take care walk, take care inpatient and IGD. Implementation training This event was attended by 18 participants consisting: of 5 pharmacists and 13 pharmacists. Training this carried out in 2 stages, namely by *offline* in class and online practice in the field. As for the material, training was carried out with method lecture as well as simulation and discussion with Lean Management materials, Waste and DOWNTIMES. Implementation on 20 June 2022 from 08.00-15.00.

Table 1. Methods of Organizing Activities

No	Step	what will be done
1	Stages or Steps to be held for solutions offered	<ol style="list-style-type: none"> 1. Drafting a proposal 2. To analyze situations and problems 3. Create and design module learning related to Lean Management at the Pharmacy Unit of the Surabaya Islamic Hospital
2	Participation partner in program implementation	Organizer training with method lecture in effort Lean Management Training at the Pharmacy Unit of the Surabaya Islamic Hospital
3	How to evaluate program implementation and program sustainability after activity devotion to the Public is finished	<ol style="list-style-type: none"> 1. Enhancement score pretest and posttest participant conducted before and after training is there is enhancement knowledge 2. Video module will be made, and all programs are included into the channel YouTube so that could give benefit to all party (Hanik et al. 2021).

3.Results and Discussion



Figure 1 Surabaya Islamic Hospital



Figure 2 Pharmacy Unit of Surabaya Islamic Hospital



Figure 3 Implementation of Lean Management Training

Table 2. Characteristics Workshop Participants Realize Healthy Islamic Boarding School

No	Characteristics	Frequency	Percentage
Gender			
1	Male	6	33.3%
2	Female	12	66.7%
Age			
1	<25 Years	5	27.8%
2	25 - 35 Years	6	33.3%
3	35 Years >	7	38.9%
Profession			
1	Pharmacist	5	27.8%
2	Pharmacy Staff	13	72.2%



Figure 4. Arrangement of the Tablet Medicine Cabinet that is Always Neat and Appropriate with Alphabet After Lean Management Training



Figure 5. Lean Management Training Guidance on the Field



Figure 6. Setup The Medicine Tablet Cabinet that is Always Neat and Appropriate with Alphabet After Lean Management Training

Following is Suite Theory enhancement knowledge related to lean management in the Pharmacy Unit of the Surabaya Islamic Hospital as a following:

a. Waste in service

If something activity process activity works no capable gives score plus in manage ingredient raw inside *value stream* process flow certain (Zahra, 2015). *waste* is trash that causes waste in the process that must remove and removed. *Waste* considered is something cost for a company so that could cause loss and gain zoom out advantage because that will existence *value stream* contained in *waste*, must conduct efficiency management so that no make ingredient Becomes wasted and resource power will capable give score add to production to experience waste (Nancy et al., 2013).

b. Lean at the Planning Stage

Management preparation pharmacy, tool health and ingredients medical finished used at RSI Surabaya A. Yani implemented by multidisciplinary, coordinated however not yet use effective processes for ensuring control quality and control cost. Pharmacists are a responsible answer to the management preparation pharmacy, tool health, and materials medical finished use that guarantees the whole series activity following applicable conditions as well as ensures quality, benefits and safety. Management preparation pharmacy, tool health, and materials medical finished used at RSI Surabaya A Yani is a something cycle activity started from Step planning, procurement and purchasing, storage, preparation and distribution and returns (Nugroho et al., 2019).

c. Lean at the Purchase Stage

At stage procurement and purchasing found waste in several categories of them no there is document official purchase order now booking to the distributor (defect), time arrival no in accordance timetable (motion) and input items come not real-time (defect). who became priority is no there is document official purchase order now booking to root distributor priority problem is a purchase order done through the phone without document official moment order (Restudana & Darma, 2022). So that recommendation the solution conducted with a method that is maximizing purchase order documents.

d. Lean at the Distribution Stage

Implementation of lean management carried out by in a row joining is making document official purchase order now beginning ordering, communication regarding the purchase order can be conducted by e-mail with confirmation through telephone and reception goods must be matched with a purchase order (Setianto et al., 2020). At a stage, this implementation no can be conducted by maximum because involve a party company pharmacy so that needs a longer time. However thereby when recommendation run hope is (1) medicine delivered following what is written in the purchase order sent by email and (2) by the existing punishment system that paid medicine following a purchase order then medicine sent will following invoice. During implementation For two weeks obtained evaluation that SIMRS homesick should facilitate making purchase orders online electronic with retrieving data from planning, so that plot service at the procurement and acceptance could be conducted more efficiently.

e. Lean At Storage Stage

Implementation of lean management carried out in a row joining is arrange the procedure and do socialization, trial procedure new and do supervision by intensive and doing evaluation performance periodically with related units (Rochimah, 2018). 10 At stage this implementation only limited new SOP creation about storage medicine and tools health. This thing because 85 policymakers require to meet periodically with ranks service temporary time-limited research make implementation no can be conducted with intervention. However thereby when the SOP is new run hope is (1) drugs stored in depots can be minimized and stock no overflow and (2) increase obedience labelling stock (Taufiqurrohman et al., 2021).

f. Process 5 R/ 5S

This method is applied so that the environment works permanent regular until becomes a habit. Originally this 5R or 5S (Seiri, Seiton, Seiso, Seiketsu, Shitsuke) method originated from Japanese applied by management to maintain order and discipline in location work. With hope performance of employee Keep going increase. 5R is something draft current management start applied throughout the world, including in Indonesia. this method is rated very powerful for support activities in the environment work and applied bias in managing pharmacy at home sick (Hariatih and Sukardi 2020).

g. Efficiency and Effectiveness Service

Efficiency is the ability To do something or produce something without throwing away material, time, or energy (Putri, 2017). **Effectiveness** is size success whether or not achievement destination something organization reach the goal. If something organization reaches its destination so organization the has walked effectively, these two words always Become one Suite efficiency and effectiveness is one unit that cannot be separated (Zahroti, 2018).

h. Downtime

Waste is all something not having a score added (Triyani, 2019). Waste is not only in the form of wasted material, but also a source of other power areas, including time, energy, and work area. Because the focus main of Lean is eliminating waste in the process, we need to understand only the waste in question (Sarah; Saptarini; Nugraha; Rambia, 2018). Following is Downtime:

- 1) Defects – A product or service that is not following required specifications will cause rework or rework. Activity this no give score adds,
- 2) Overproduction – produce products exceed request, or more beginning from the schedule,
- 3) Waiting – this Waste includes among other activities waiting for the machine to automatic, waiting for goods to come, waiting for approval,
- 4) Non-Utilized talent – This waste is also included the addition of 7 more wastes before known. Putting people who don't involve directly in the process of becoming activities that are not worth adding,
- 5) Transportation – This Waste consists of transfer or transportation that is not required like placement temporary, accumulation return, transfer goods,
- 6) Inventory – This Waste includes Inventory, stock or excess inventory or materials that are not processed,
- 7) Motion – Time and energy are used because the movement that doesn't give a score adds, including for example seek, a movement that is not efficient and not ergonomics. This waste motion can be originated from man or machine,
- 8) Extra processing – Any additional processes that are not required for product only will add cost to production. For more remember the 8 wastes, you can use the acronym "DOWNTIME".

i. Quality Improvement

Is Suite action used to set and run policy quality something company or organization to ensure quality goods or services it produces (Hariatih dan Sukardi, 2020). This is very necessary because remember good that company nor business certain want quality products they are always consistent Like the name are quality *improvement* addressed of course for increase quality products or moderate service produced by the company (Rusdi, 2018). Enhancement quality focuses on the production process. Enhancement quality could run in the middle of production so that the process is more optimal and the resulting product can be trusted quality (Saifulloh, 2012).

j. PDSA

Use four Step approach. 1). *The plan* is identified Step change for repair; 2). *Do* is Step test the changes that have been done; 3). *The study* is a Step in researching success change; 4). *An act* is a Step to identify adapt and inform cycle new (Zahroti, 2018).

Table 3. Pre and Post-Test Measurement Results for Workshop Participants to Realize Healthy Islamic Boarding School

No	Knowledge	Pre-Test	PostTest
1	Waste in service	70%	92%
2	Lean on stage Planning	63%	82%
3	Lean on stage Purchase	65%	83%
4	Lean at the Distribution Stage	66%	84%
5	Lean on stage storage	78%	88%
6	Process 5 R	83%	90%
7	Efficiency and effectiveness service	56%	81%
8	DOWNTIMES	51%	82%
9	Quality Improvement	62%	81%
10	PDSA	63%	80%

No	Knowledge	Pre-Test	PostTest
	Average	66%	84%

From Table 2 we get information that occurs enhancement knowledge with an average of 18%.

4. Conclusion

Lean Management Training at the Pharmacy Unit of the Islamic Hospital Surabaya provides many benefits to participants, the training which has two stages of training namely theory and practice provides an increase in participants' knowledge which increases by 18%. This training was attended by 18 participants consisting of 5 pharmacists and 13 TTK. It is hoped that they can make services more effective and efficient so that they can improve service quality and increase profitability. Participants understand their role in providing effective services that align lean management so that it can be applied in daily implementation

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6. Bibliography

- Atikah, N., Parhatiwi, S. N., Pertiwi, A. D., & Utami, E. F. (2021). Identifikasi waste: DOWNTIME pada pelayanan resep rawat jalan di instalasi farmasi Rumah Sakit Islam Siti Hajar Mataram. *Scientific Journal of Pharmacy*, 17(2), 107–114.
- Hanik, U., Syagran, E. A., Setianto, B., Bistara, D. N., Adriansyah, A. A., & Sa'adah, N. (2021). Edukasi Kuliah WhatsUp Group (KulWaG) Dalam Tingkat Pemahaman Perawatan Gigi Pada Lansia Pada Komunitas Lansia Binaan Rumah Sakit Islam Surabaya. *To Maega : Jurnal Pengabdian Masyarakat*, 4(3), 386. <https://doi.org/10.35914/tomaega.v4i3.881>
- Hariatih, & Sukardi. (2020). Penerapan Prinsip Continuous Improvement dalam Total Quality Management Untuk Meningkatkan Mutu dan Keselamatan Pasien. *Jurnal PenKoMi: Kajian Pendidikan & Ekonomi*, 3(2), 62–74.
- Nancy, Marchaban, & Wardani, P. E. (2013). Proses Pelayanan Instalasi Farmasi Rumah Sakit Lean Hospital Approach for Continuous Service Process Improvement in. *Jurnal Manajemen Dan Pelayanan Farmasi*, 91–98.
- Nugroho, T., Fitriyani, N., Ekasari, P. A., & Prasanti, I. (2019). Pengaruh Waste dengan Pendekatan Lean Hospital Terhadap Pengendalian Biaya Kualitas dan Produksi Effect of Waste With Lean Hospital Approach Toward Quality and

- Production Cost Control. *Jurnal Manajemen Kesehatan Yayasan RS. Dr. Soetomo*, 5(1), 38–45.
- Putri, R. (2017). *Pendekatan Lean Hospital Untuk Mengidentifikasi Waste Kritis di Instalasi Farmasi Rawat Jalan RSI PKU Muhammadiyah Pekajangan* (Vol. 549). Universitas Muhammadiyah Yogyakarta.
- Restudana, K. A., & Darma, G. S. (2022). Upaya Penerapan Metode Lean Thinking Pada Proses Pelayanan Farmasi Rawat Jalan. *Relasi : Jurnal Ekonomi*, 18(1), 101–131. <https://doi.org/10.31967/relasi.v18i1.527>
- Rusdi, R. (2018). Continues Improvement Sebagai Upaya Dalam Meningkatkan Mutu Pendidikan Pedesaan. *Al-Tanzim : Jurnal Manajemen Pendidikan Islam*, 2(2), 150–160. <https://doi.org/10.33650/al-tanzim.v2i2.396>
- Saifulloh, A. (2012). Konsep Continuous Quality Improvement (CQI) dalam Dunia Pendidikan. *At-Ta'dib*, 7(1), 1–13.
- Sarah; S., Nugraha, R. (2018). Artikel Review : Penerapan Lean Management dan Six Sigma sebagai Tools Dalam Penerapan Continues Improvement Di Industri Farmasi “DEWI.” *Farmaka*, 16, 213–221.
- Setianto, B., Adriansyah, A. A., & Asih, A. Y. P. (2020). Implementasi Manajemen Lean di Unit Farmasi Rumah Sakit Islam Surabaya A. Yani. *Jurnal Manajemen Kesehatan Indonesia*, 8(2), 81–87. <https://doi.org/10.14710/jmki.8.2.2020.81-87>
- Siti, F., Rochimah, A. A. M. (2018). *Waste Kritis Pada Instalasi Farmasi Rawat Jalan RSUP DR. Soeradji Tirtonegoro : Lean Management Approvment*.
- Taufiqurrohman, Zulma, A. R. F., Anggraeni, G., & Sucipto, A. E. (2021). Evaluasi Pengelolaan Obat dan Identifikasi Waste di Instalasi Farmasi dan Sterilisasi RS Akademik UGM. *Journal of Hospital Accreditation*, 3, 22–26.
- Triyani, F. (2019). Analisis Waste (Pemborosan) pada Instalasi Farmasi Rawat Jalan Menggunakan Pendekatan Lean Management di RS PKU Muhammadiyah Bantul Waste Analysis Of Outpatient In Pharmacy Departement With Lean Management Approach In PKU Muhammadiyah Hospital, Bantul. *Fakultas Kesehatan Masyarakat, Universitas Ahmad Dahlan Email*, 59(5), 82–90.
- Zahra, D. L. S. K. (2015). Penggunaan Konsep Lean untuk Meningkatkan Efisiensi Pelayanan Instalasi Farmasi Rawat Jalan di Rumah Sakit Anna Medika Bekasi. *Arsi*, 1, 29–42.
- Zahroti, E. N. (2018). Pendekatan Pdsa Untuk Perbaikan Proses Pada Indikator Sasaran Keselamatan Pasien Di Rumah Sakit. *Jurnal Administrasi Kesehatan Indonesia*, 6(2), 111. <https://doi.org/10.20473/jaki.v6i2.2018.111-121>