

## Drug Use Profile: In The Process of Drug Discontinuation at Mataram City Hospital in 2023

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**Abstrak:** Automatic Stop Order (ASO) adalah suatu tindakan yang dilakukan oleh apoteker untuk menghentikan pengobatan pasien dengan alasan tertentu saat pasien berada di rumah sakit dan durasi penggunaan yang telah ditentukan oleh Tim Farmasi dan Terapi Rumah Sakit. Tujuan penelitian ini adalah untuk mengetahui gambaran penggunaan obat ASO di RSUD Kota Mataram Tahun 2023. Metode penelitian yang digunakan dalam penelitian. Penelitian ini merupakan penelitian observasional dan menggunakan rancangan deskriptif retrospektif. Hasil Gambaran penggunaan obat ASO dimulai dari karakteristik jenis kelamin presentasi terbanyak yaitu laki - laki sebanyak 8 pasien (53,33%) sedangkan untuk jenis kelamin perempuan sebanyak 7 pasien (46,67%). Dan untuk karakteristik usia pasien yang berada pada rentang usia 5 - 10 tahun sebanyak 1 pasien (6,67%). Sementara itu rentang usia 2 6 -4 5 tahun sebanyak 6 Pasien (40%) dan rentang usia 46-65 tahun sebanyak 8 Pasien (53,33%). Penggunaan obat terbanyak pada golongan Antibiotik yaitu Ceftriaxone 7 (26,92%), Cefoperozone 7 (26,92%), Meropenem 1 (3,84%) disusul golongan Analgesik-antipiretik yaitu Ketorolak 2 (7,69%) dan Parasetamol 9 (34,61%). Dari hasil wawancara tersebut dapat disimpulkan bahwa penggunaan obat pada proses terminasi obat (ASO) di RSUD Kota Mataram tahun 2017 sudah rasional.

**Kata kunci:** Penggunaan Obat; Penghentian Obat; Automatic Stop Order

**Abstract:** Automatic Stop Order (ASO) is an action taken by pharmacist for stop treatment patient with reason certain when patient be at home pain and duration of use determined by Team Hospital Pharmacy and Therapy. To get an overview usage drug ASO at Mataram City Hospital Year 2023. Research methods used in study. This is study observational and using design descriptive retrospective. Results Overview of use drug ASO started with characteristics like type sex own presentation that is man man as many as 8 patients (53.33%) while for type sex woman alone 7 patients (46.67%). And for characteristics age Patient in range age 1 5 -2 5 years is 1 Patient (6.67%). Meanwhile range age 2 6 -4 5 year is 6 Patients (40%) and range age 46-65 years is 8 Patients (53.33%). The highest use of drugs in the Antibiotic group was Ceftriaxone 7 (26.92%), Cefoperozone 7 (26.92%), Meropenem 1 (3.84%) followed by the Analgesic-antipyretic group, namely Ketorolac 2 (7.69%) and Paracetamol 9 (34.61%). From the interview results, it can be concluded that the use of drug in the process of termination medicine (ASO) at Mataram City Hospital 2023 is already rational.

**Keywords:** Drug Use; Drug Discontinuation; Automatic Stop Order

### Introduction

House Sick as Wrong One from means health is referenceservice health with function main to organize effort healthwhich is healing and recovery for patient based on Ministerial regulation Health Number 72 Year 2016 about Standard Service Pharmacy in House Sick. Service pharmacy aiming for increase quality, ensure certainty law for power pharmacy and protect patient and public from use drug Which No rationalin frame safety patient (patient safety). Service pharmacy in House Sick covering 2 (two) activity, that is management supply pharmacy, tools Health and Material Medical Finished Use and Service Pharmacy. Service pharmacy covering assessment And service recipe, service information drug (PIO), counseling, visit patient, monitoring effect side drug (MESO), monitoring therapy drug (PTO) and evaluation use & evaluation drugs use drug is Wrong One activity For to study rationality use medicine in a facility service health Rationality use drug is condition Where patient accept drug in accordance with his needs in dose Which in accordance For period time adequate with price cheap For patient And its people (WHO, 1985).

On each individual entitled get decent life Good That in health personal and also his family including one of them get service health such as in Hospitals, Pharmacies and also Health Center. As recommended by WHO Health Services health under service pharmacy that aims for increase use rational medicine, improving security use medicine and efficiency cost drug as well as increase quality life appropriate patient with practice service good pharmacy (Good *Pharmacy Practices*) (Ministry of Health of the Republic of Indonesia, 2006). Use irrational or non- rational is use drugs with method Which No in accordance with use rational



like Which defined above. Throughout the world more from 50% all drug prescribed, issued, or for sale in a way No appropriate while 50% of patients fail for get it with Correct. Type of use drug irrational generally is poly pharmacy drugs, use antimicrobials that are not appropriate, use drug Which excessive whereas stock oral more appropriate, failure prescription in accordance with guidelines clinical and treatment Alone Which No right (*self-medication*).

One of determining factor success in service pharmacy is use rational medicine. WHO defines use rational medicine, namely patient accept drug in accordance with need the clinic, at the right dose individually, time usage measurable, and affordable the price by the patient concerned, or public around it. Usage drugs that are not rational is problem Serious in service health Because possibility can happen impact negative (Satibi et al., 2016).

One of step for limit use drugs that are not rational so set a system which are called termination drug (ASO). termination drug (ASO) is an action Which done by pharmacist for stop treatment patient with reason certain when patient be at home pain and duration of use determined by the Team Hospital Pharmacy and Therapeutics. ASO applied to drugs category certain Which considered as drug Which strong/potent and medicines which requires review regular (Gunawan, 2015). Anti microbial, narcotics and medicines controller (except phenobarbital, methadone and buprenorphine/naloxone), anti-infective (topical) And systemic) except antiretroviral, medicines TB And ketoconazole shampoo, solution inhalation via nebulizer and parenteral ketorolac is category medicines that classified as in ASO. There is a number of objective he did termination drug on drug in House Sick among them for ensure safety patients and improve monitoring therapy so that ASO can help prevent therapy the medicine that prolonged. Example consequence from No existence ASO is use antimicrobial in a way excessive cause improvement resistance antimicrobial; And disturbance kidney and gastrointestinal consequence use ketorolac Which No appropriate.

Pharmacist as guarantor answer in service pharmacy in House Sick must have knowledge and skills in field pharmacy. Pharmacist must can do service pharmacy that Good Where Wrong the only one is evaluation use drug Because usedrugs irrational in a way excessive can stimulate request patient Which No appropriate, and reduce trust patient to system service health.

## Methods

Study done in Mataram City Regional Hospital in a way observational and using design descriptive retrospective. Data used is interviews and secondary data record medical (RM) patient so that researcher No follow involved in observation patient. Population study This is all patient data record medical at Mataram City Hospital on period time December 2023 - February 2024. Sample in research this is the record data medical Mataram City Hospital patients who underwent *automatic stop order* (stopping order). In the research This is the instrument used is interviews and recorded data medical.

## Results and Discussion

Characteristics Patients in the study This includes gender and age. Distribution results characteristics Patient based on type gender and age are explained as following This:

**Table 1.** Characteristics Patient based on type sex

| Gender | Frequency | Percentage |
|--------|-----------|------------|
| Male   | 8         | 53.33      |
| Female | 7         | 46.67      |

Based on research that has been done obtained from the number of samples, namely 15 patient medical record data, it can be seen that amount patient man as much as 8 (53.33%). Meanwhile amount Patient Woman as much as 7 (46.67%). From these results, it can be seen that the largest gender of the research sample is male with a percentage of 53.33%.

**Table 2.** Characteristics Patient based on age

| Age                     | Frequency | Percentage |
|-------------------------|-----------|------------|
| Toddler = 0-5 years     | -         | -          |
| Children = 6-11 years   | -         | -          |
| Teenagers = 15-25 years | 1         | 6.67       |
| Adult = 26-45 years     | 6         | 40         |
| Elderly = 46-65 years   | 8         | 53.33      |

From the results of the research that has been conducted on 15 patient medical records, it was found that the highest use of drugs was in the antibiotic group (ceftriaxone, cefoprazone, meropenem) as many as 15 (57.69%) followed by analgesic-antipyretic drugs (ketorolac and paracetamol) with the use of 11 drugs (42.31%). The use of antibiotics and analgesics is because the patient's medical record data was taken at the inpatient depot, precisely in the ICU/NICU room, namely patients who have undergone surgery.

### Drug Characteristics

**Table 3.** ASO Drugs Used at Mataram City Hospital

| No | Drug Name   | Amount total = 15 patient |            |
|----|-------------|---------------------------|------------|
|    |             | Frequency                 | Percentage |
| 1  | Ceftriaxone | 7                         | 26.92      |
| 2  | Cefoprazone | 7                         | 26.92      |
| 3  | Meropenem   | 1                         | 3.84       |
| 4  | Ketorolac   | 2                         | 7,69       |
| 5  | Paracetamol | 9                         | 34,61      |

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| No | Type                  | Drug Name   | Amount total = 15 patient |            |
|----|-----------------------|-------------|---------------------------|------------|
|    |                       |             | Frequency                 | Percentage |
| 1  | Antibiotics           | Ceftriaxone | 15                        | 57.69      |
|    |                       | Cefoprazone |                           |            |
|    |                       | Meropenem   |                           |            |
| 2  | Analgesic-Antipyretic | Ketorolac   | 11                        | 42.31      |
|    |                       | Paracetamol |                           |            |

### ASO Drug Usage Profile

**Table 5.** Dosage and Duration of Use of ASO Drugs Used at Mataram City Hospital

| No | Type                  | Drug        | Drug Dosage | Duration of Drug Use |
|----|-----------------------|-------------|-------------|----------------------|
| 1  | Antibiotics           | Ceftriaxone | 2x1 ampoule | 5-10 days            |
|    |                       | Cefoprazone | 3x1 ampoule | 5-10 days            |
|    |                       | Meropenem   | 2x1 ampoule | 5-10 days            |
| 2  | Analgesic-Antipyretic | Ketorolac   | 2x1 ampoule | 3-7 days             |
|    |                       | Paracetamol | 3x1 bottle  | 5 days               |

Dosage and duration of use for ASO drugs at Mataram City Hospital based on the medical record data studied, the dosage for ceftriaxone is 4 grams per day (2 ampoules for one day) and the duration of drug use is 5 days, cefoprazone is 4 grams per day (2 ampoules for one day) and the duration of drug use is 5 days, meropenem daily usage is 60mg (2 ampoules for one day) and the duration of drug use is 5 days, while the dose for ketorolac is 60 mg/ml (2 ampoules a day) and the maximum duration of drug use is 3 days and Paracetamol is 3 mg/ml (3 bottles a day) and the maximum duration of drug use is 3 days.

### Interview Results

Based on observations and interviews conducted with pharmacists and pharmacy technicians, it was found that drugs included in the use of ASO are antibiotics and analgesic-antipyretic drugs. The procedure for implementing ASO at Mataram City Hospital begins with examining the patient's leukocyte levels. If the examination shows that the patient's leukocyte levels are high, ASO treatment will be continued, while if the patient's leukocyte levels are low, the use of ASO via syringe will be stopped. pump that has been determined by the Doctor and Pharmacist. To ensure there are no negative impacts after stopping the drug, officers or nurses will monitor the patient's condition from the beginning of administration to the administration of ASO. The use of ASO category drugs at Mataram City Hospital is rational because based on interviews that have been conducted, it is known that there is cooperation between doctors and pharmacists in handling the process of using and stopping ASO drugs.

### Conclusion

Based on the research that has been conducted, the following conclusions can be drawn:

1. Drugs included in the use of ASO based on the service policy of Mataram City Hospital include; antibiotics (ceftriaxone, cefoprazone, meropenem) and analgesic-antipyretics (Ketorolac Injection, Ibuprofen Injection and Paracetamol Infusion)
2. The procedure for implementing ASO at Mataram City Hospital begins with monitoring the patient's condition by doctors and pharmacists to determine whether the use of ASO category drugs in patients should be stopped or continued.

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