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## Profile Of Skin Medicine Prescription To General Patients At Kimia Farma Kartini Pematangsiantar Pharmacy

Andi Josep Hutahaean<sup>1)\*</sup>, Heny Kurniasari<sup>2)</sup>, Kezia Tabita Pangaribuan<sup>3)</sup>

<sup>1,2,3)</sup> Program Studi Farmasi, Sekolah Tinggi Ilmu Kesehatan (STIKes) Arjuna Laguboti, Jl. Y.P. Arjuna, Pintu Bosi, Toba, Sumatera Utara 22381, Indonesia

\*Coresponding Author

Email: andihutahaean20743@gmail.com

#### Abstrak

Skin disease is a disorder that is limited or dominant on the surface of the skin and can be treated in various ways, including topical or oral routes. Some conditions are caused by bacteria, viruses, fungi, parasites or allergic reactions. This study aims to determine the profile of skin drug prescribing at Kimia Farma Kratini Pematangsiantar Pharmacy in June 2022 based on patient characteristics, route of administration, dosage form and variations of the mixture, using retrospective data and descriptive data presentation. The results of this study indicate that from 97 samples of prescriptions in June 2022, most of them were in adult patients 49.48% with the most route of drug administration being topical 53.51%, the most dosage form being cream 53.51%, and variations of the mixture. 47.95% while for non-concoction it is 52.05% based on the total frequency of the number of drugs (342).

Keywords: Drug Prescription Profile, Skin Disease, Concoction

#### INTRODUCTION

The skin covers the surface of the body and has the main function as a protector from various kinds of disturbances and external stimuli, as well as the main defense against bacteria. Skin health needs to be considered because the skin is the most vital part and is a mirror of health and beauty. Skin that is not maintained in its health becomes very vulnerable to infections that can cause various skin diseases

Skin disease is a skin disorder caused by viruses, parasites, germs, fungi and infections that can affect anyone of any age. Skin diseases if not treated seriously can worsen health conditions and these skin diseases can affect certain parts of the body or the whole body. In skin disorders that often occur due to several factors such as residence, environment, allergies, climate, unhealthy living habits, and others (Hidayat, 2018).

Skin conditions contributed 1.79% to the global disease burden as measured by Disability-adjusted life years (DALYs) of 306 diseases and injuries in 2013. Skin diseases varied from 0.38% to the total burden for Dermatitis (atopic, contact, and seborrheic dermatitis), 0.29% for acne vulgaris, 0.19% for psoriasis, 0.19% for urticaria, 0.16% for viral skin diseases, 0.15% for fungal skin diseases, 0.07% for scabies. All other skin and subcutaneous diseases account for 0.12% (Karimkhani Aksut dkk, 2017).

Based on a Southeast Asian Dermatology survey, the prevalence of Atopic Dermatitis varies between countries, from 1.1% in 13-14 year olds in Indonesia, to 17.9% in 12 year olds in Singapore. Asian patients have mild to moderate Atopic Dermatitis. Based on a study of 80 North Indian children aged 3 months to 12 years experiencing mild Atopic Dermatitis 41.2% and moderate 55% (Rubel dkk, 2013). Data obtained from several studies with the theme of community-based prevalence of skin diseases in developing countries indicate that skin diseases in developing countries are common, which is around 20-80%. (Asyrifah, 2021).

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In Indonesia, skin disease is growing. Evidenced by the Indonesian Health Profile Data in 2015 which showed that skin and subcutaneous tissue diseases ranked third out of the 10 most common diseases in outpatients in hospitals throughout Indonesia based on the number of visits, namely 192,414 visits, new case visits 122,076 visits while old cases 70,338 visits (Depkes, 2015). Indonesia is a country in a tropical climate, which facilitates the proliferation of germs that cause skin diseases, so skin problems are still common. Unhealthy environmental conditions such as lack of clean water, unhealthy latrines, high physical contact in one room/house and the availability of sewerage (SPAL) are also factors that cause skin health problems. (Wahyuni, 2017).

Drugs that are usually used for infectious skin diseases are topical antimicrobials and topical corticosteroids. Antimicrobials are often prescribed but not matched with appropriate provisions. While topical medications are generally safe and effective for use without medical supervision, there is a lack of evidence for the treatment of infections (Ratnaningtyas, 2016).

Prescribing is one of the health services at the pharmacy service level. According to the World Health Organization (WHO) there are still inaccuracies in drug prescribing, preparation and sale of drugs which account for nearly 50% of all drug use. Improper use of drugs will cause problems (simatupang, 2014).

Based on the background of the problem and the results of a survey conducted at the Kimia Farma Kartini Pematangsiantar Pharmacy, it shows that skin disease is very likely the most common disease based on the number of prescriptions from Skin and Gender Specialists in the Kimia Farma Kartini Pematangsiantar pharmacy. This underlies the authors to conduct this research because researchers want to know the description of the use of skin medicines and the percentage of skin medicines at the Kimia Farma Kartini Pematangsiantar Pharmacy using patient prescription data in June 2022.

## RESEARCH METHODS

The research design uses a descriptive observational research design with retrospective data collection. The main objective in using this method is to describe the nature of an object's current state based on the facts as they are, then analyzed and interpreted using past sources. This research is used to look at the pattern of prescribing and suitability of skin medicines at Kimia Farma Kartini Pematangsiantar Pharmacy in June 2022. This research was conducted at the Kimia Farma Kartini Pharmacy in Pematangsiantar in July 2022. The data taken are age group, route of administration, dosage form, and mixture variations. The samples used in this study were chosen randomly using a systematic random sampling technique. The population in this study were all general patient prescriptions for skin diseases written by skin and venereal specialists at Kimia Farma Kartini Pharmacy Pematangsiantar in June 2022. The samples in this study were taken from some of the skin drug prescriptions for skin disease patients at the Kimia Farma Kartini Pharmacy, Pematangsiantar. So based on the calculation of the sample taken there are as many as 97 samples, so that the sample can represent the entire population.

## RESULTS AND DISCUSSION

#### **Characteristics of Patient Data**

Patient data used as the population in this study were prescription data that came from Dermatologists and Venereologists at Kimia Farma Kartini Pematangsiantar Pharmacy for the June 2022 period. Prescription data was collected, carried out in July 2022. The total population taken was 128 prescription sheets, with a size samples into 97 recipes calculated using the Slovin formula.

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**Table 1. Age Characteristics of Skin Disease Patients** 

Patient Age Characteristics	Number of Patients	Percentage (%)
Children (0-11 Year)	14	14,43
Youth (12-19 Year)	19	19,59
Adult (20-59 Year)	48	49,48
Elderly (> 60 Year)	16	16,50
Total	97	100 %

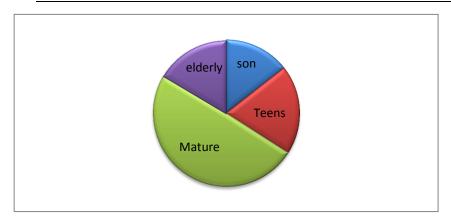


Figure 1. Graph Of Age Characteristics Of Patients

## Prescription Profile of Skin Drugs Based on Route of Administration

Pharmacotherapy for skin diseases basically must produce maximum therapeutic effect with minimal side effects. Drugs must reach the target, namely dysfunctional skin cells, for the drug to have an effect. There are two ways that drugs can be absorbed, namely topically and can also be orally, as can be seen in Table 2 below:

**Table 2. Routes of drug administration** 

Drug Administration	Frequenc	Percentage (%)
Route	y	
Topically	183	53,51
Oral	159	46,49
Total	342	100 %

# **Dosage Forms Of Drugs Obtained By Patients**

Based on the route of administration, there are 3 forms of drugs given to patients as needed, namely cream, tablets and syrup.

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**Table 3. Dosage Forms Obtained by Patients** 

Dosage	Frequenc Percentage	
Form	$\mathbf{y}$	(%)
Cream	183	53,51
Tablet	136	39,77
Syrup	23	6,72
Total	342	100%

## Variations In Drug Preparations for Skin Diseases Given to Patients

There are variations in the dosage forms for skin disease patients at Kimia Farma Kartini Pharmacy, Pematangsiantar, such as concoctions and non-concoctions. Where the concoction drug in question is two or more active ingredients mixed in one container. Meanwhile, the non-concoction drug in question is a single drug in a prescription, including creams, tablets and syrups, both skin medicines and other drugs such as prescription supplements.

**Table 4. Variations of Skin Drug Concoctions Given to Patients** 

Variatio n	Frequenc y	Percentage (%)
Concocti on	164	47,95
Non Concoction	178	52,05
Total	342	100%

## Penggunaan Obat Kulit Terbanyak

The highest prevalence of skin drugs can be seen from this study, taken from the 5 most drugs prescribed during June 2022, including topical and oral drugs.

Table 5. Most Use of Skin Drugs

Medicine name	Amount of Drug in Prescription	Percentage (%)
Sagestam	71	38,38
Histrine	40	21,62
Lameson	30	16,22
Forderm	24	12,97
Hydrocortisone	20	10,81
Total	185	100%

### **Discussion**

Based on Table 1, the results of the demographic characteristics of skin disease patients based on age were obtained. Patients with child age totaled 14 patients (14.43%), adolescents totaled 19 patients (19.59%), adults totaled 48 patients (49.48%), while for elderly patients totaled 16 patients (16.50%)). This shows that adult patients aged 20-59 years are more affected by skin diseases.

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In this study, two routes of administration were obtained, namely topical and oral. Topical administration was 53.51% while orally 46.49% (Table 2). This shows that the topical route of administration is more widely used than oral administration.

Based on the route of administration, there are 3 forms of drugs given to patients as needed. The dosage forms used were 53.51% cream, 39.77% tablets, 6.72% syrup (Table 3). This shows that the most widely administered dosage form is the cream dosage form. So the results obtained are in accordance with the most routes of administration in the treatment of skin diseases at Kimia Farma Kartini Pematangsiantar Pharmacy, namely topically. Cream is a semi-solid dosage form that has a relatively liquid consistency formulated as a water-in-oil or oil-in-water emulsion. (Widodo, 2013). The advantages of using cream include, it is easy to spread evenly, practical, easy to clean or wash, how it works on the local tissue, not sticky, gives a cold feeling and others. The disadvantages of using cream preparations include difficulty in making them because they have to be hot, break easily, dry easily and break down due to disruption of the mixed system caused by changes in temperature and changes in composition (Fitriani, 2015)

Based on the results of the study in Table 4, the variation in concoction drug preparations was 47.95% and for non-concoctions was 52.05%. This shows that more non-concoction drugs are prescribed for skin disease patients at Kimia Farma Kartini Pematangsiantar Pharmacy in June 2022. A variety of concoction drug preparations that are widely prescribed at Kimia Farma Kartini Pematangsiantar Pharmacy in June 2022 are drugs in the form of cream preparations. This shows that the more concoction drug prescriptions received by patients, the more it is seen that the availability of special formulas is still very limited or not available at pharmacies, or the prices are not affordable for patients so they need to be given in concoction form.

Based on the research results from Table 5 above, the most widely used drugs are drugs in the Corticosteroid class, namely forderm, hydrocortisone and lameson, for the antibiotic class, namely sagestam, and for the Antihistamine class, namely histrine. The use of the most prescribed drugs in June was Sagestam with 71 prescriptions (38.38%), which was the highest prescribed drug, histrine with a prescription of 40 (21.62%), lameson with 30 (16.22%) prescriptions, forderem with 24 (12.97%) prescriptions, and hydrocortisone with 20 (10.81%) prescriptions.

### **CONCLUSION**

Based on the results of the study, it can be concluded that of the 97 total patient prescriptions at Kimia Farma Kartini Pemtangsiantar Pharmacy in June 2022 which were used as samples, there were 4 patient age characteristics, namely children of 14.43%, adolescents of 19.59%, adults of 49.48 % which is the age of the most patients, and the elderly are 16.50%, and of the 342 total drugs prescribed at the Kimia Farma Kartini Pematangsiantar Pharmacy in June 2022, there is a profile of drug prescriptions with 2 routes of administration, namely topically 53, 51% and orally 46.49%. In the Profile for prescribing skin drugs at Kimia Farma Kartini's Pematangsiantar Pharmacy in June 2022 there are 3 dosage forms, namely cream at 53.51%, tablets at 39.77%, and syrup at 6.72% and there are 2 variations of the concoction, namely concoction 47.95% and non-concoction 52.05%. The most used drugs prescribed in June were Sagestam with 71 prescriptions (38.38%), which was the highest prescription drug, histrine with 40 (21.62%) prescriptions, lameson with 30 (30) prescriptions. 16.22%), forderem by amount.

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## **REFERENCES**

- Asyrifah, N. (2021). Kajian Pola Peresepan dan Rasionalitas Penggunaan Obat Pada Pasien Penyakit Kulit di Salah Satu Klinik di Kota Cimahi. Universitas Bhakti Kencana. <a href="http://localhost:8080/xmlui/handle/123456789/3490">http://localhost:8080/xmlui/handle/123456789/3490</a>.
- Depkes. (2015). Profil Indian Dermatol. 416. Kesehatan Tahun 2015 Kota Yogyakarta Kota Yogyakarta.
- Fitriani, Y.N., INHS, C., Yuliati, N., Aryantini, D., (2015). Formulasi and Evaluasi Stabilitas Fisik Suspensi Ubi Cilembu (Ipomea batat as L.) dengan Suspending Agent CMC Nadan PGS Sebagai Antihiperkolesterol Volume 2.
- Hidayat., Ramla.. (2018). Hubungan kondisi ruangan dan personal hygiene terhadap kejadian penyakit kulit pada asrama putri pondok pesantren sultan hasanuddin kab. Gowa. *Jurnal Sulolipu 18*(2), 195–203. <a href="https://bestjournal.untad.ac.id/index.php/Galenika/article/view/5304">https://bestjournal.untad.ac.id/index.php/Galenika/article/view/5304</a>.
- Karimkhani Aksut, C., Dellavalle, R.P., Naghavi, M., (2017). 292. Global skin disease morbidity and mortality: An update from the Global Burden of Disease Study 2013. J. Invest. Dermatol. 137, S31.
- Ratnaningtyas, W.D., Hutomo, M., (2016). *Penelitian Retrospektif: Pengobatan Topikal pada Pasien Dermatitis Atopik*. 28, 7.
- Rubel, D., Thirumoorthy, T., Soebaryo, R.W., Weng, S.C.K., Gabriel, T.M., Villafuerte, L.L., Chu, C. (2013). Y., Dhar, S., Parikh, D., Wong, L.C., Lo, K.K., Consensus guidelines for the management of atopic dermatitis: An AsiaP acific perspective. Sari, F., Yenny, S.W., 2018. J. Dermatol. 40, 160171
- Simatupang, A., (2014). Pedoman WHO tentang Penulisan Resep yang Baik sebagai Bagian Penggunaan Obat yang Rasional.
- Wahyuni, D. (2017). Pola Peresepan Obat Kulit Di Apotek Afina Yogyakarta Periode Januari-Juni 2017. 67–68.
- Widodo, H., (2013). Ilmu Meracik Obat Untuk Apoteker Wijayanti, A., Wijayanti, E., 2014. . Yogyak arta . Evaluasi Peresepan Antibiot Med ika