



Prescribing Practices of Medications in the Outpatient Dermatology Department of a Public Hospital

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

Aim: This study aims to describe the prescribing pattern of medications by dermatology outpatient department in a public hospital in Alkharj.

Methodology: This is a retrospective study that included collecting data from outpatient electronic prescriptions in a public hospital in Alkharj. All of the outpatients who received prescriptions written by the dermatology department between 1st of January till 30th of June 2018 were included in the study. The data were collected and analyzed using Microsoft Excel.

Results: A total of 328 patients received outpatient prescriptions written by dermatology department. Most of them were females (62.80%) and aged less than 40 years (67.38%). The most prescribed drug in the present study was Hydrocortisone (14.33%) followed by White Soft Paraffin (8.84), Fusidic acid (8.54%) and Cetirizine (8.23%). Most of the medications were prescribed as ointment (28.66%) followed by creams (28.04%).

Conclusion: Females were found to be more predominant with dermatological diseases when compared to males. The most commonly prescribed drugs were hydrocortisone, white soft paraffin, fusidic acid and cetirizine. It is important to evaluate prescribing pattern of the drugs periodically to improve the quality of prescriptions.

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1. INTRODUCTION

The main goal of drug therapy is to improve patients' quality of life. Medicine plays an essential role in drug therapy. The drug should be used appropriately by giving the right drug for the right patient at the right duration and dose as per clinical need [1].

Prescription order is a vital document between the patient and the physician. It is an order for a scientific medication for a person at a specific time [2]. Drugs' prescribing is an important skill, which needs to be uninterruptedly assessed and developed. It reflects the skill of clinicians in diagnosis and attitude towards selecting the most suitable cost effective therapy [3]. Irrational use of medications is nowadays a global problem. Irrational prescribing has a serious influence on health and economy, resulting in resources' wastage [4].

Prescription audit is an effective tool to constitute guidelines to improve the utilization patterns of medications and to restrict the irrational prescribing [5-7]. Several factors related to the incorrect prescribing which include prolongation of illness, ineffective and unsafe treatment and excessive economic burden to the patient [8,9].

Skin disorders vary greatly in severity and in symptoms. They can be permanent or temporary, and may be painful or painless. Some are genetic disorders while others may have situational causes. Moreover, some skin conditions are minor but others can be life-threatening and can indicate a more serious issue [10]. Patients seen at the dermatology department could have numerous skin disorders that include inflammatory and autoimmune skin disorders, infectious skin disorders and allergic skin disorders [11]. Schappert reported that in the United States, approximately 6% of outpatient visits are for dermatological diseases and non-dermatologists treat a high percentage of these patients [12,13].

There is a limited data about the prescribing of medications by dermatology departments in Alkharj. Therefore, this study aims to describe the prescribing pattern of medications by dermatology outpatient department in a public hospital in Alkharj.

2. METHODOLOGY

This is a retrospective study that included collecting data from outpatient electronic prescriptions in a public hospital in Alkharj regarding the pattern of prescribing medications in the dermatology department.

All of the outpatients who received prescriptions written by the dermatology department between 1st of January till 30th of June 2018 were included in the study. So the prescriptions that were written by other departments were excluded from the study.

The data were collected and analyzed using Microsoft Excel after the approval of the study from IRB committee. The descriptive data was represented as percentages and numbers.

3. RESULTS AND DISCUSSION

A total of 328 patients received outpatient prescriptions written by dermatology department. Most of them were females (62.80%) and aged less than 40 years (67.38%). Table 1 shows the demographic characteristics of the patients.

The most prescribed drug in the present study was Hydrocortisone (14.33%) followed by White Soft Paraffin (8.84), Fusidic acid (8.54%) and Cetirizine (8.23%). The most prescribed medications are shown in Table 2.

Most of the prescriptions were written by resident prescribers (99.70%). Table 3 shows the Level of the prescribers in the department of dermatology.

Table 4 shows the dosage forms of the prescribed medications. Most of the medications were prescribed as ointment (28.66%) followed by creams (28.04%) and solid forms such as capsule, tablet or powder (16.16%).

The most prescribed drug in the present study was hydrocortisone followed by white soft paraffin, fusidic acid and cetirizine. Shrestha and Shrestha stated that antihistaminics (28.7%), corticosteroids (16.9%) antibiotics (14.8%), antifungals (14.8%) were the most common class of drugs prescribed dermatology outpatient department [14]. Sumana and Shetti reported that in outpatient department of dermatology at tertiary care hospital, antihistaminics were the most commonly prescribed group of drug [15].

Mohamed Saleem et al reported that the most commonly prescribed topical agents in dermatology outpatient department were topical steroids and its combination followed by topical antifungal agents [16].

Additionally, Sweileh revealed that topical corticosteroids of intermediate and highest efficacy are commonly used for outpatients attending dermatology clinics in north Palestine [17].

Table 1. Patients' demographic characteristics

Variable	Category	Number	Percentage
Gender	Male	122	37.20
	Female	206	62.80
Age	Less than 10	37	11.28
	10-19	55	16.77
	20-29	63	19.21
	30-39	66	20.12
	40-49	47	14.33
	50-59	27	8.23
	60-69	19	5.79
	70-79	9	2.74
	More than 79	5	1.52

Table 2. The most prescribed medications in dermatology outpatient department

Medication	Number	Percentage
Hydrocortisone	47	14.33
White Soft Paraffin	29	8.84
Fusidic acid	28	8.54
Cetirizine	27	8.23
Urea	22	6.71
Clindamycin	21	6.40
Miconazole	14	4.27
Adapalene	14	4.27
Betamethasone	13	3.96
Ketoconazole	9	2.74
Mometasone	9	2.74
Others*	95	28.96

* Others included all of the medications that were prescribed for less than 9 patients

Table 3. The prescribers level

Prescribers Level	Number	Percentage
Specialist	1	0.30
Resident	327	99.70
Consultant	0	0.00

Table 4. Dosage forms of the prescribed medications

Dosage forms	Number	Percentage
Ointment	94	28.66
Gel	24	7.32
Capsule/ Tablet/Powder	53	16.16
Shampoo	17	5.18
Suspension/ Syrup/Solution	14	4.27
Cream	92	28.04
Lotion	34	10.37

Pathak et al. [18] stated that regarding new cases attending dermatology outpatient department, antihistaminics (24.13%) were prescribed most frequently followed by antifungals and antibiotics. Herakal et al. [19] also reported that antihistamines were the most commonly prescribed drugs in the dermatology outpatient department. Gambre et al. [20] stated that in their study antifungals, antihistaminics, and steroids constitute the major bulk of drug prescribed to the participants. On the other hand, Sripada et al. [21] reported that the most commonly prescribed classes were found to be Antibacterial drugs (22.1%) followed by Antifungal drugs 258 and Antihistamines (14.6%). They also stated that among the Antihistamine drug class, Levocetirizine (76.2%) was most commonly prescribed followed by Hydroxyzine (12.2%) [21].

Most of the medications were prescribed as ointment and creams followed by solid forms such as capsules, tablets and powders. Shrestha and Shrestha [14] stated that drugs prescribed were mainly given by topical route (50.6%) followed by oral route. Sumana and Shetti [14] reported that in outpatient department of dermatology at tertiary care hospital, drugs prescribed by parenteral route were 65 (6.87%), oral route were 410 (43.38%) and topical 470 (49.73%). Pathak et al. [18] stated that in dermatology outpatient department, topical agents constituted almost 60% of the total prescription. Gambre et al. [20] stated that in their study, the most common route of the prescribed drug was oral followed by topical.

4. CONCLUSION

In our study, females were found to be more predominant with dermatological diseases when compared to males. The most commonly prescribed drugs were hydrocortisone, white soft paraffin, fusidic acid and cetirizine and the most frequently prescribed route of administration was found to be topical. It is important to evaluate prescribing pattern of the drugs periodically to improve the quality of prescriptions.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

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COMPETING INTERESTS

Author has declared that no competing interests exist.

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