

The Potential Impact of Off-Label Medication Use on Patient Access: A Cross Sectional Survey of Minoxidil Availability

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To the Editor:

Early and effective treatment for Androgenetic Alopecia (AGA) is crucial to prevent long-term dermatologic and psychosocial consequences.^{1,2,3} With the release of and attention to the *New York Times* (NYT) article 'An Old Medicine Remedies Hair Loss for Pennies a Day' on August 18th, 2022, low dose oral minoxidil (LDM) drew heightened patient interest for management of AGA, with 71% of nationwide Dermatologists surveyed nationwide in one study claiming a sudden rise in medication inquiry, and prescription numbers surpassing 85% total increases since the aforementioned NYT article was published.^{3,4} Given the increased demand for this off label use, a potential for LDM 2.5 mg shortages in recent months is plausible and could impact continuity of care. We sought to evaluate current inventories of varied dosages of oral minoxidil at mainstream pharmacies in surrounding neighborhoods of Washington DC, Maryland, and Northern Virginia.

Four retail chain pharmacies with approximately even distribution among suburban, urban, and rural towns in the DMV (District of Columbia, Maryland, and Virginia) (Table 1) were selected including CVS, Giant, Walgreens, and Harris Teeter. During the first week of October 2023, a total of 277 pharmacies were contacted by telephone using standardized scripts to assess the availability and quantity of oral minoxidil in stock both for 2.5 mg tablets and 10 mg tablets, with specific inquiry for a 30-day supply and thirty tablets of each dosing. Charting, calculations, and analysis of results were performed using prism.

Twenty-three percent (33/143) of all Northern Virginia pharmacies confirmed availability of both oral minoxidil 2.5 mg and 10 mg tablets, with adequate inventories for thirty-day supplies. Similar findings with limited reserves for both dosages were reported when calling Washington DC (17.9%, 12/67) and Maryland (14.9%, 10/67) pharmacies. Only 40.1% (111/277) of all contacted pharmacies in the DMV reported availability of LDM 2.5 mg tablets for a thirty-day supply; 29.6% (82/277) of the very same DMV pharmacies reported having oral minoxidil 10 mg tablets to cover the same time frame. When stratified

geographically, Maryland showed the greatest deficit in oral minoxidil availability: 28.3% (19/67) of the state's pharmacies confirmed thirty-day supplies of LDM 2.5 mg tablets in stock and 22.3% (15/67) of the pharmacies noted having thirty-day supplies of oral minoxidil 10mg tablets. Northern Virginia and Washington DC pharmacies demonstrated similar inventory distributions of LDM 2.5 mg tablets, with 44% (63/143), and 43.2% (29/67) respectively, having availability. Volume of oral minoxidil 10 mg tablets also lagged, with 32.2% (46/143) of Northern Virginia pharmacies confirming sufficient supply for a thirty-day prescription fill, and 26.8% (18/67) of Washington DC pharmacies with analogous counts (Figure 1).

These data reveal a significant care gap resulting from oral minoxidil 2.5 mg and 10 mg shortages within the DMV, which could potentially translate to the national level. Such paucities pose a challenge both for Dermatologists managing AGA but also primary care physicians utilizing this medication on label. This study underscores the need and opportunity for approaches

FIGURE 1. Evaluating current inventories of oral minoxidil in the DMV.

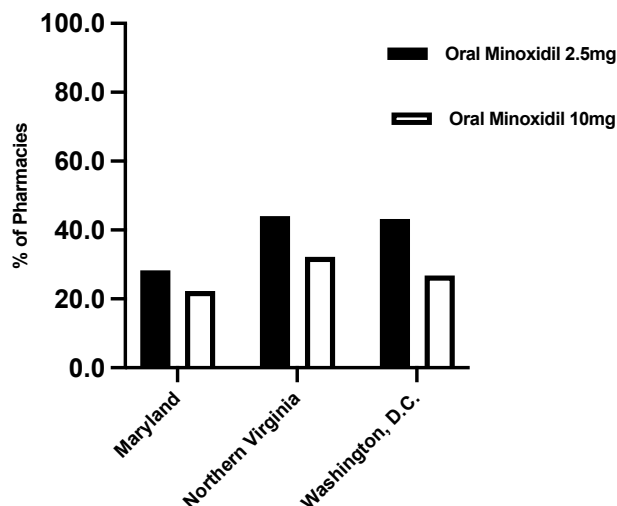


TABLE 1.

2020 Census Total Population of All Contacted Neighborhoods Within the DMV ^{5,6}	
Maryland	
Bethesda	68,056
Rockville	67,117
Potomac	47,018
Gaithersburg	69,657
Germantown	91,249
Silver Spring	81,015
Oxon Hill	18,791
Northern Virginia	
Alexandria	159,467
Fairfax	24,146
Vienna	16,473
Tysons	26,374
McLean	50,773
Oakton	36,372
Reston	63,226
Herndon	24,532
Ashburn	46,511
Fairfax Station	14,030
Falls Church	14,658
Arlington	234,000
Annandale	42,240
Springfield	32,960
Washington, DC	
Dupont Circle	15,099
Foggy Bottom	14,642
Georgetown	701,974
West End	13,037
Chevy Chase	10,176
Tenley Town	1,806
Navy Yard	2,794
Anacostia	54,812
Downtown DC	8,449
Shaw	10,004
Columbia Heights	30,400
Palisades	2,390
Foxhall	4,900
Capitol Hill	29,120
Northeast DC	148,886
Wharf	2,914

to both disseminate information regarding potential shortages and ascertain how to best access or share finite resources in times of low inventories. Given AGA management is chronic and abrupt cessation of therapy can have detrimental effects on treatment course, there must be a consensus on how to address supply scarcities to prevent interruptions of patient care.

DISCLOSURES

The authors have no conflicts of interest to declare.

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